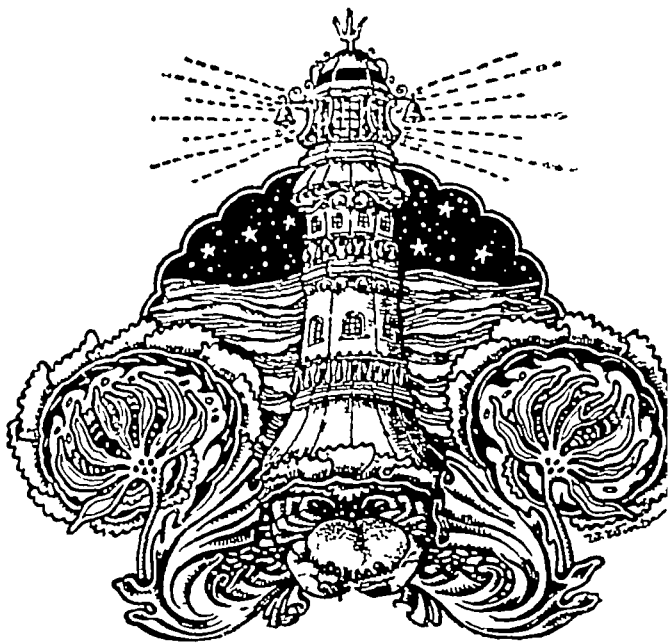


Seaports of India & Ceylon

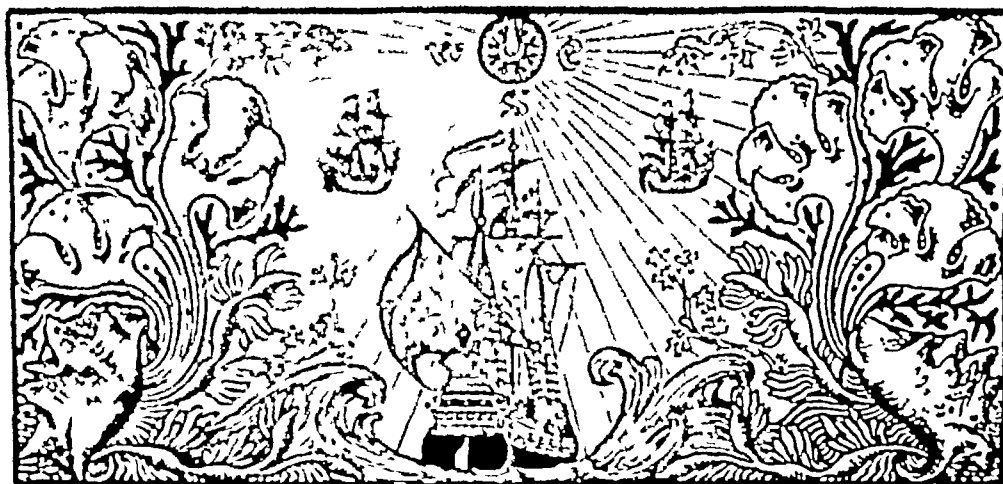
Reader, let this little taste that I have given thee of the Summer Islands satisfie thee for the present, ere it be long thou shalt have a larger relation thereof. Hastie occasion of business doth make mee write somewhat hastilie, and leave out many things which were fitte to be spoken of. wherefore against my will I am forced to leave my worke, which I have begunne, before I come into the middest of it. but I hope it will suffice you that are my friends to passe it over in the best manner you can. for there is much broken English of it and badly penned regard I pray you the matter not the manner, the truth of the storie not the stile.

Jourdan, 1613



732

SEAPORTS OF INDIA & CEYLON



HISTORICAL AND DESCRIPTIVE
COMMERCIAL AND INDUSTRIAL
FACTS, FIGURES, & RESOURCES

COMPILED AND EDITED BY ALLISTER MACMILLAN, F R G S

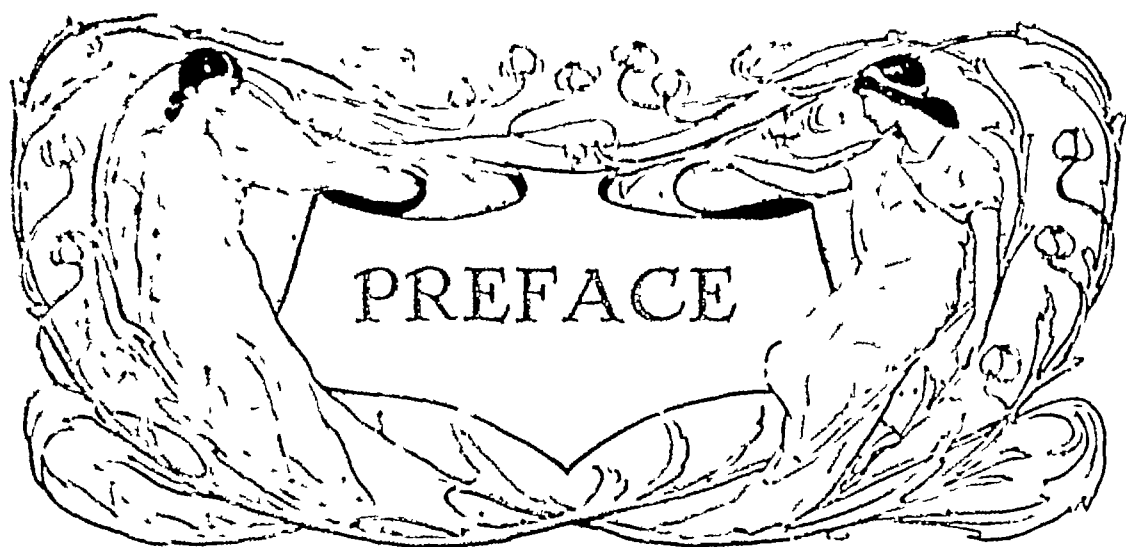


1928

W H & L COLLINGRIDGE, 148 & 149, ALDERSGATE STREET,
LONDON, E C 1



Printed by
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LONDON EC1



THE bibliography of the Indian Empire is vast and comprehensive, in keeping with the great history-absorbing interest, and paramount importance of that territory of 1,805,352 square miles and its remarkable medley of 320 millions of people, speaking something like 150 different languages—whose perplexing diversities in caste and creed, in condition and outlook, create problems and potentialities far beyond the demarcations of ordinary appraisement and the orthodox standards of Western comparison.

Many, too, are the books that have been written about Ceylon, the exquisitely beautiful and fertile island Crown Colony of 25,363 square miles and a population of about 5,000,000, so closely related by history and blood to the peninsula from which it is separated by only thirty-two miles of sea.

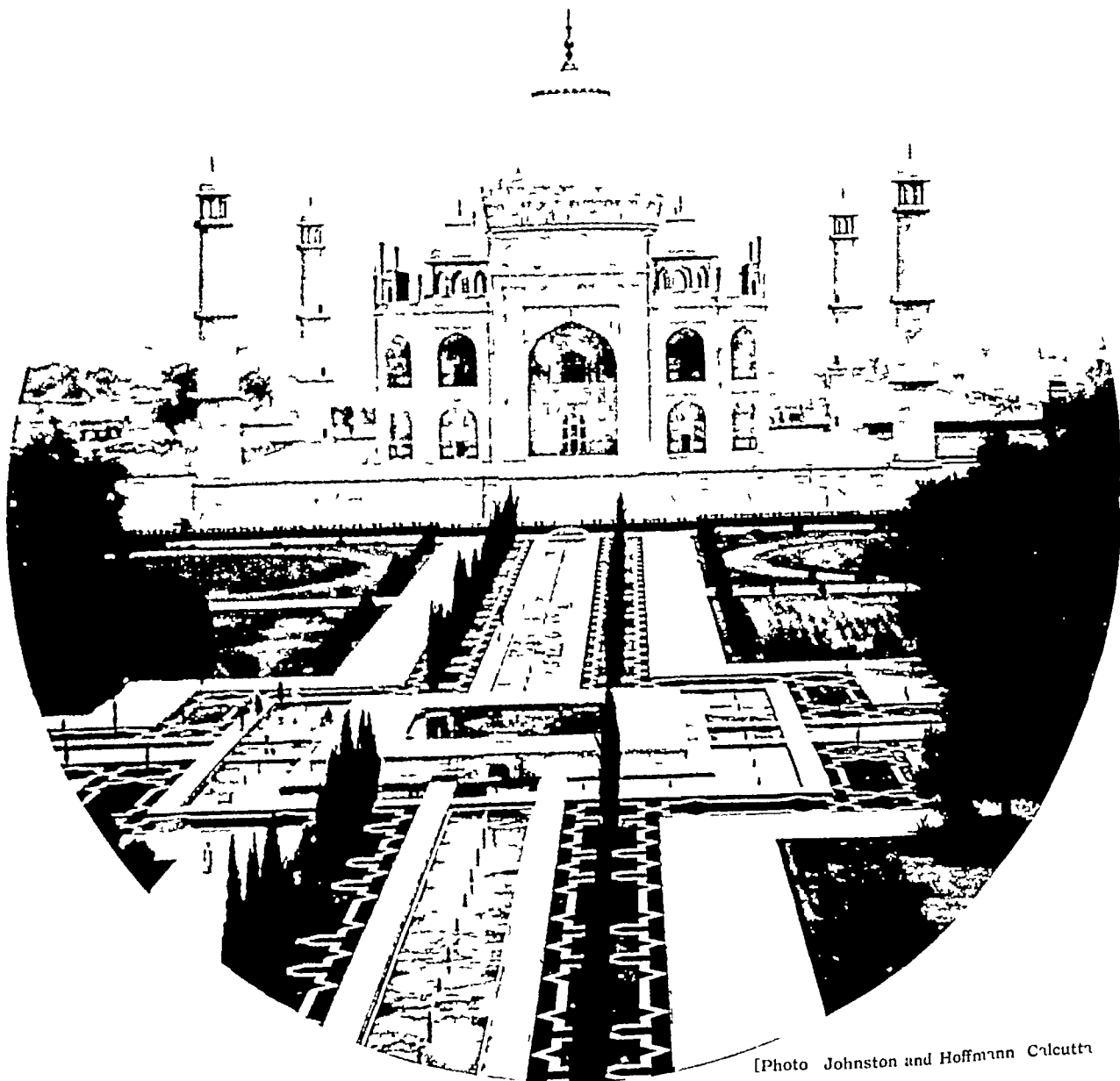
In this volume there is no attempt to deal with the political difficulties and social aspirations of the inhabitants of these wonderful portions of the British Empire. A conscientious effort has been made, however, to convey useful and interesting information regarding the seaports with which it is concerned, more especially their commercial and industrial activities. The work is the latest addition to a series of similar publications compiled by me on various parts of the world, and the appreciation with which these have been received, as well as the success they have attained, is a gratifying indication that they are of proved attraction and utility.

The time and labour necessary for a book of this description are considerable. In the compilation of the various historical and descriptive sections I am greatly indebted to the kind and capable assistance of the following gentlemen: Mr T. E. Harris, the well-known artist, who has resided for upwards of thirty years at Calcutta; Mr R. P. Masani, the brilliant Parsi writer and Managing Director of the Central Bank, Bombay; Mr T. E. Grady, Sub-editor of the *Madras Mail*, Madras; Mr Gordon M. Dyce-Keele, Editor of the *Daily Gazette*, Karachi; Mr J. J. Nolan, F.R.G.S., formerly Editor of the *Rangoon Times*; Mr L. A. Arndt, the gifted Burgher litterateur, late of St. Thomas's College, Colombo; and Mr S. E. Hancox, B.A., retired from the Government Service of Ceylon. The articles on the business houses are the result of my own personal investigation and observation, rendered possible only by the courtesy and kindness of the principals of the firms detailed, to whom I desire to convey my heartiest thanks and appreciation. Similar expressions are likewise due to the photographers whose names appear under the various reproductions of photos supplied or taken specially by them for this volume, which, whatever its merits or demerits, can only be estimated properly by those familiar with the peculiar difficulties inseparable from the specialised character of the undertaking.

Alister Macmillan

This enclosure including the gardens and outer court is a parallelogram of 1800 feet by more than 1000 feet. The outer court surrounded by arcades and adorned by four gateways forms an oblong occupying in length the whole breadth of the enclosure by about 480 feet in depth. The principal gateway measuring 110 feet by 140 leads from the court to the garden which with their marble canals fountains and cypress trees are almost as beautiful as the tomb itself. The tomb stands on a raised platform 18 feet high faced with white marble and is exactly 111 feet square. At each corner of this terrace stands a minaret 133 feet in height and of the most

building wholly composed of white marble this was required to temper the glare which otherwise would have been intolerable. As it is no words can express the chastened beauty of that central chamber seen in the soft gloom of the subdued light which reaches it through the distant and half-closed openings that surround it. When used as a pleasure palace, it must have been the coolest and the loveliest of garden retreats and now that it is sacred to the dead it is the most precious and most impressive of the sepulchres of the world. This building is an early example of that system of inlaying with precious stones which became the great characteristic of the style of

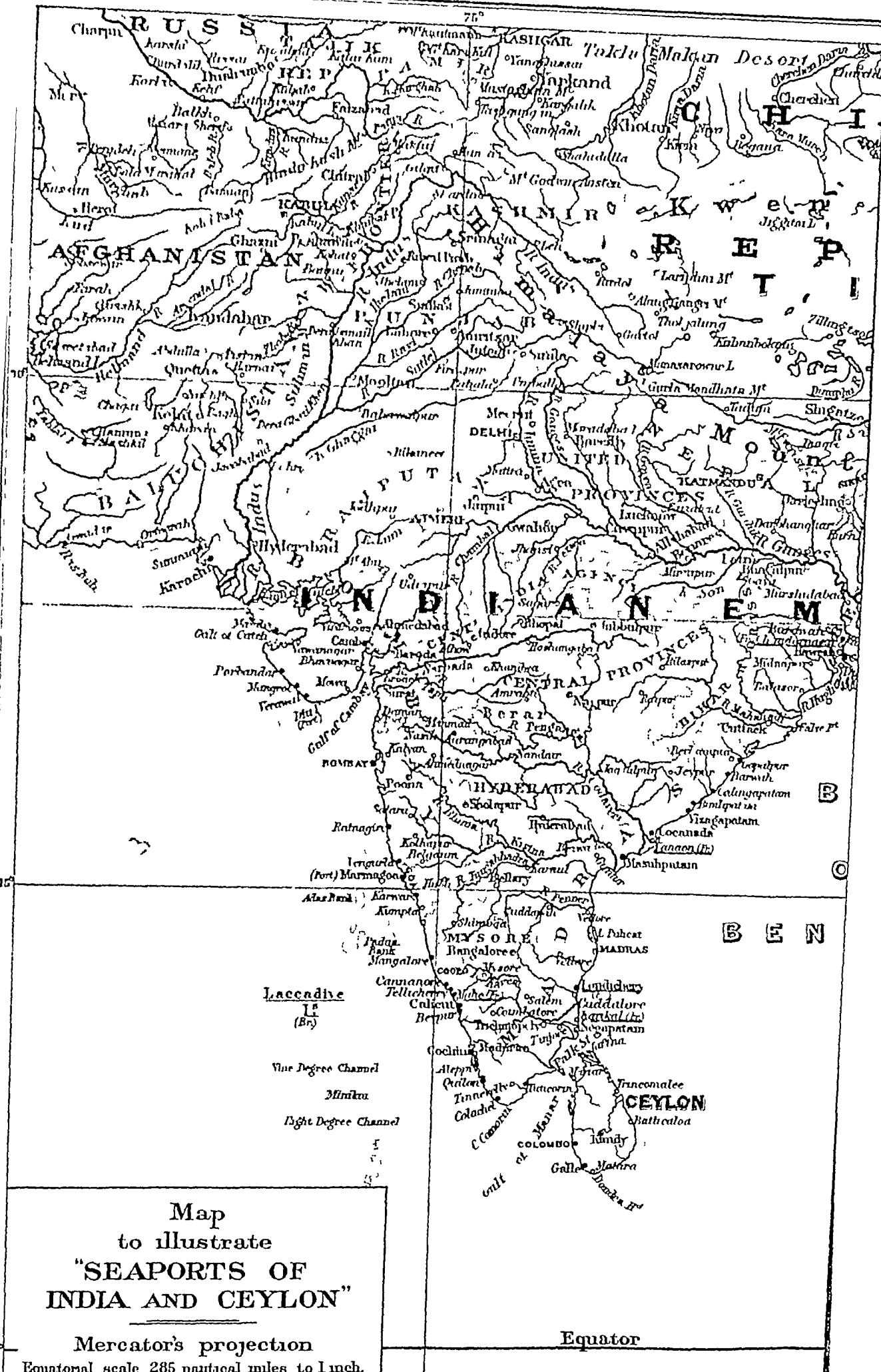


[Photo Johnston and Hoffmann Calcutta]

THE MOST BEAUTIFUL BUILDING IN THE WORLD

exquisite proportions—more beautiful perhaps than any other in India. In the centre of the marble platform stands the mausoleum a square of 186 feet with the corners cut off to the extent of 33 feet 9 inches. The centre of this is occupied by the principal dome 58 feet in diameter and 80 feet in height under which is an enclosure formed by a screen of trellis work of white marble, a chef-d'œuvre of elegance in Indian art. Within this stand the two tombs. These however as is usual in Indian sepulchres are not the true tombs the bodies rest in a vault level with the surface of the ground beneath the plain tomb in a vault level with the surface of the ground beneath the plain tomb in a vault level with the surface of the ground beneath the plain tomb. In each stone placed exactly underneath those in the hall above. In each angle of the building is a smaller dome of two storeys in height 26 feet 8 inches in diameter and connected by various passages and halls. The light to the central apartment is admitted only through double screens of white marble trellis work of the most exquisite design one on the outer and one on the inner face of the walls. In our climate this would produce nearly complete darkness but in India and in a

the Moghuls after the death of Akbar. All the spandrels of the Taj all the angles and more important architectural details are heightened by being inlaid with precious stones such as agates, blood stones jaspers and the like. These are combined in wreaths scrolls and frets as exquisite in design as they are beautiful in colour and relieved by the pure white marble in which they are inlaid they form the most beautiful and precious style of ornament ever adopted in architecture. It is lavishly bestowed on the tombs themselves and the screens that surround them but more sparingly introduced on the mosque that forms one wing of the Taj and on the fountains and surrounding buildings. The judgment indeed with which this style of ornament is apportioned to the various parts is almost as remarkable as the ornament itself and conveys a high idea of the taste and skill of the Indian architects of this age.—FROM FERGUSON'S *History of Architecture*



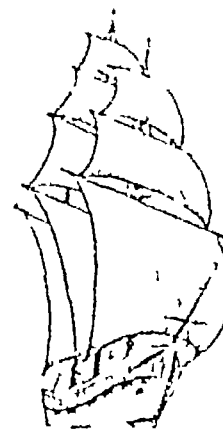
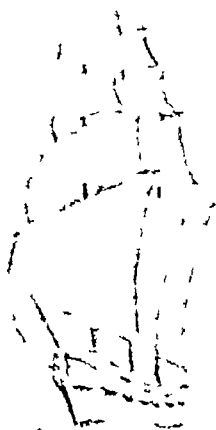
Map
to illustrate
"SEAPORTS OF
INDIA AND CEYLON"

Mercator's projection

Equatorial scale 285 nautical miles to 1 inch.

Equator

75° Longitude East of Greenwich.



— TRINCOMALEE

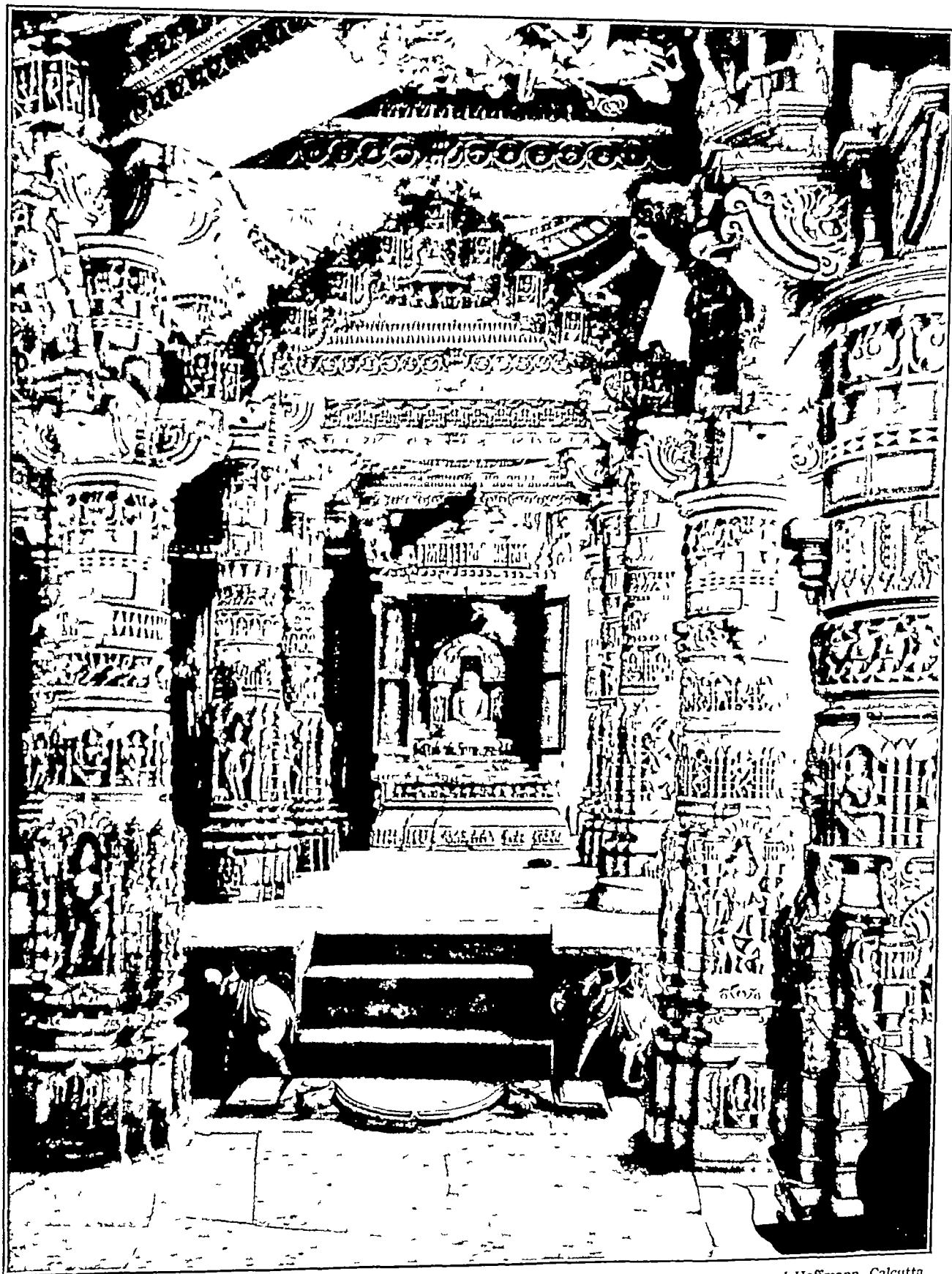
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[Photo Johnston and Hoffmann Calcutta

INTERIOR OF DILWARRA TEMPLE, MOUNT ABU.



INDIA.

The Land of Wealth and Wonders



FROM time immemorial India has been for Europe a land of enchantment, a synonym for wealth and wonders, a metaphor of riches and empire. All the stories of the East traced the name of India as a symbol of immensity in expanse and riches. Thus Milton speaks of the bounty of Eve, pleasing her spouse's appetite with

"Whatsoever Earth all
bearing mother, yields
In India East or West"

The ancients knew it as a place of tropic storms, where the sun was constant and hot, where immense rivers cut through to sea, as a fertile land rich in harvests, gold, and jewels. Such were the accounts given by Strabo and Pliny. Strabo also described it as the home of many curious creatures, inhabited by a people with an elaborate social system under an organised bureaucracy, and a land with a Greek appreciation of epic poetry. Herodotus portrayed the Indians as a people of many nations and languages, broadly divided into the dark barbarians of the marshes and the fair, refined Aryans of the North. He mentions also the wild cotton "surpassing in beauty and quality the wool of sheep," the cannibals in the jungles, the crocodiles in the Indus, and the bewildering diversity and fashions of the population.

The fullest account of India which the Greek

world ever had was that of Megasthenes, who sojourned for some time at Indian Courts as ambassador, in Pataliputra, to Chandragupta. Besides many interesting details about Brahmuns and fakirs, men and animals, and the splendour of the festivals of the country, he gave a very luminous account of the administrative system of Chandragupta. There is good reason to endorse the suggestion made by the author of *India in English Literature* that Alfred the Great must have heard of India, for, according to William of Malmesbury, that famous British king sent presents to her rulers, but whenever England's interest may have been aroused in India it was not until the closing years of the fourteenth century that the attention of Englishmen was turned to the lands of the East. The discoveries of travellers in Asia then stimulated in European countries the desire to know more of the East. Fact and fiction were strangely blended in the fascinating accounts presented by writers of that period. All that could agitate the hearts and minds of the people, whether romantic or materialistic, was summed up in the magic name of India. But what brought England directly in touch with those new conceptions of the world that ultimately led to the Renaissance and accounted for the Reformation was Vasco da Gama's great discovery. On July 8, 1497, da Gama, after a night of prayer and a religious procession to the Tagus, sailed round the Cape to India. The whole current of European history, social, religious, commercial, political, was altered by this epoch-making event. It incidentally changed the destiny of India also. "Vasco da Gama, a



INDIAN FAKIRS.

- 1 FAKIR AND HIS CARRIAGE
2 ROLLING FAKIR
3 MAHOMEDAN FAKIR

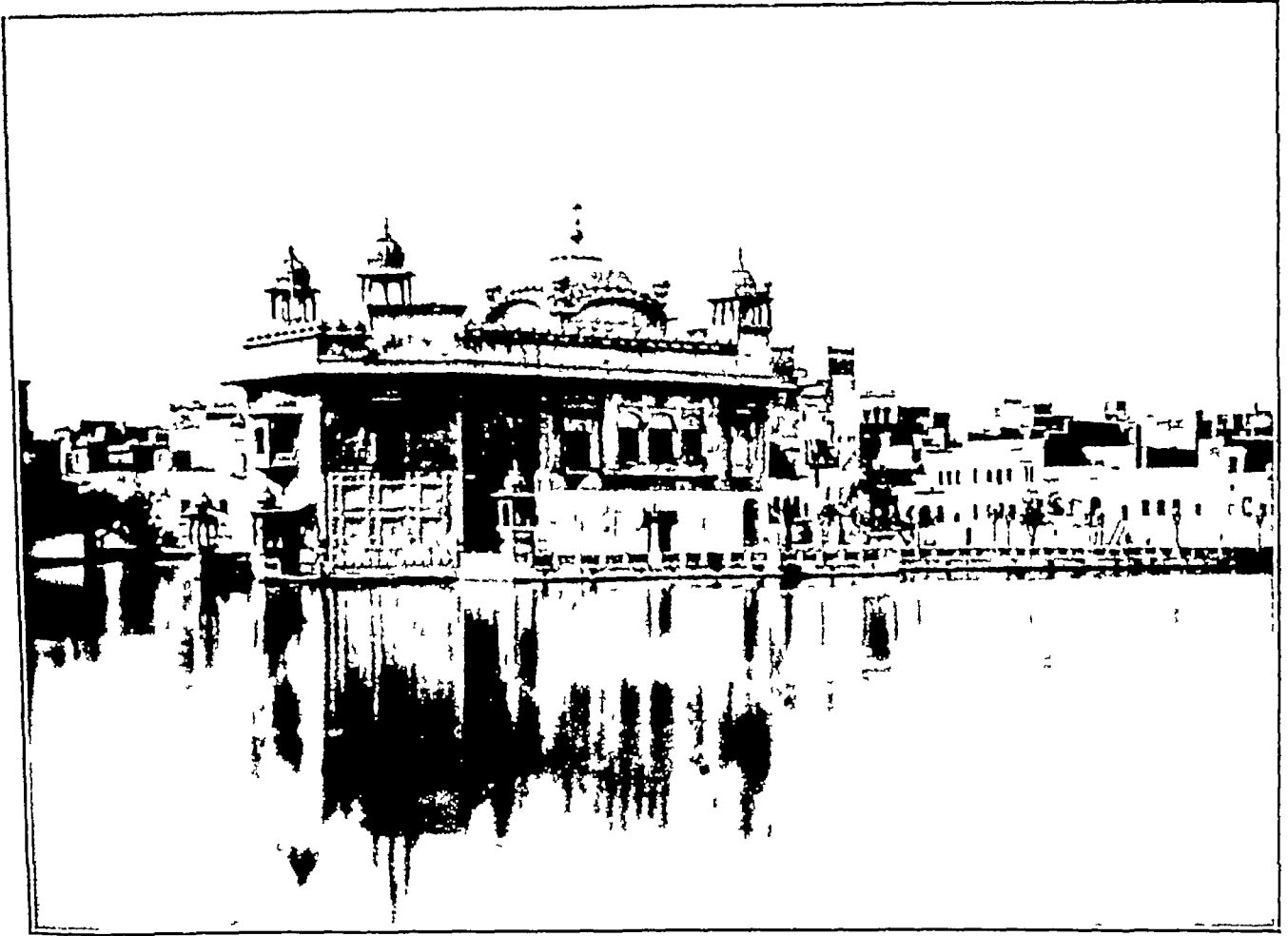
- 4 FAKIR ON BED OF UPRIGHT NAILS
5 LYING IN SIDE A POST OFFICE BOX

- 6 FAKIR ON THORNS IN HIS SMALL CART
7 FAKIR WITH LEG ROUND HIS NECK
8 FAKIR CAMPED IN A STREET

Our navigation, and the advancement of lawful traffique, to the benefit of Our Commonwealth."

Those enterprising merchants made London the commercial centre of the world. Henceforth the English nation looked beyond the Channel, the Dutch danger, and the Spanish dread. How the early adventurers went to India, how Bombay was ceded to the British Crown, how the merchants became rulers of the whole country by accident—

takes and misunderstandings have at times strained the relations of the governors and the governed, but these have been merely passing phases. During the gloomy days of the Mutiny, and on several occasions thereafter, it seemed to be thought that India was a source of anxiety and expense to Great Britain, a clog upon her resources, a drain upon her population. The British nation was actually advised to relinquish India. Those who gave that advice realised not that the



GOLDEN TEMPLE, AMRITSAR.

[Photo Johnston and Hoffmann Calcutta

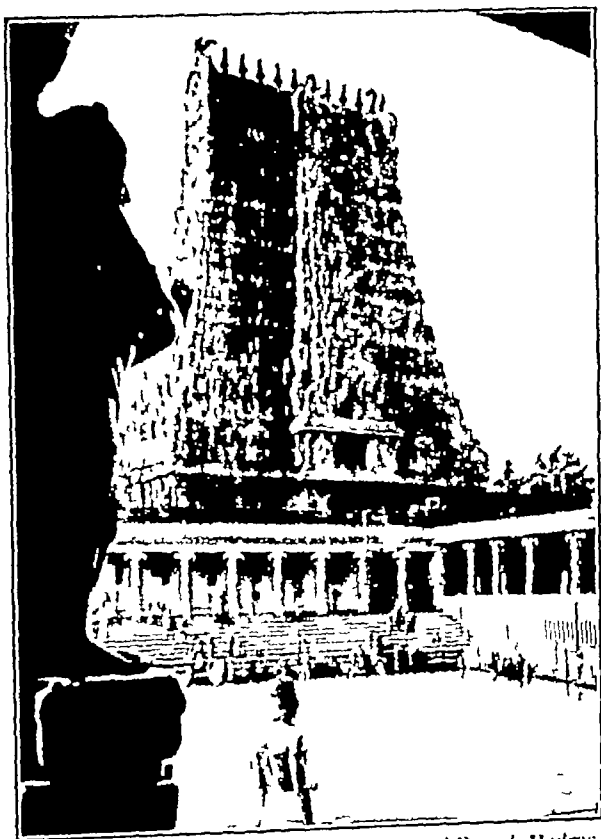
all that is well known to every student of Indian history. The Mutiny of 1857 led to the termination of the rule of the Company, which ceased to exist in 1858, after having transferred to the Crown what might, in the words of the historian Marshman, be described as "an empire more magnificent than that of Rome." Since those days the aim of British statesmen has been to raise the hundreds of millions of Indians thus brought within the orbit of Great Britain to a self-respecting independent position within the Empire. The advance has been rather slow. Periods of progress have alternated with periods of pause, mis-

betraiture of the trust would have been an act of cowardice, and would have done incalculable damage to India, while surrendering a dependency of no small value. Having assumed the government of the vast population of India, Great Britain has rescued the people from anarchy, revolution, and internal strife, and they are now living in prosperity under her sway. To assist in the orderly evolution of India towards nationhood is an obligation which affords to the British nation an unique opportunity and scope for giving effect to the purest and loftiest ideals of humanity and philanthropy. Apart from moral considerations,

vast material interests are at stake. An enormous amount of British capital has been sunk in India in railways, canals, and innumerable commercial and industrial concerns, on the assurance of the continuance of the British rule. Under the British flag a great sea-borne trade has been established, and extensive markets are opened for British manufactures which would be more or less closed if the country reverted to disorder on the cessation of the British power. Moreover, the Indian Empire has

the projected Air Service from Cairo to Karachi, but even now distance has been practically annihilated, and the visitor from the West can travel from Liverpool to Bombay and thence throughout the peninsula in perfect comfort and security. Treasures may not be brought back, but there cannot fail to be an indelible impression of the vastness of the territory and its immense potentialities. Figures are cold and convey but little meaning. Suffice it to say that while India is today the principal customer of British goods in the world, Australia, with her larger purchasing power, being the second greatest, the possibilities of commercial and industrial expansion in the country are great and many, and merely await exploitation.

Throughout India there is at present much activity and agitation in connection with political independence. Since the World War many forces, internal and external, have been at work to awaken Indians in general, and the educated urban population in particular, to their claims to an increasing share of the government of their country. The total area of the Indian Empire is 1,805,352 square miles, and has always been compared with that of Europe without Russia. About 3,000 square miles were added at the last Census (1921) owing to the enumeration by estimate of certain tracts in Burma which had been excluded from previous censuses. India, therefore, has an area about half that of the United States, and a population nearly three times as large. The entire population numbers about 320 millions, speaking something like 150 different languages. The vast majority consists of illiterate peasants in the rural districts, who employ, to a very large extent, the same primitive methods of tilling the soil that their ancestors used centuries ago, and live in villages which have scarcely changed with the progress of civilisation. But it must not be forgotten that the literate classes and urban dwellers, roused to a sense of self-consciousness by the impact of the progressive West, though forming but a small proportion of the total population, are still numerous enough to be equal to a population of a secondary European State. Each year the schools and colleges turn out young men and women fired with a desire for a form of self-government that will enable them to carry their heads high as citizens of a free State. During the Great War the people of India got the opportunity to show what service their country could render as an integral part of the British Commonwealth. Besides being an important reservoir of supplies for the allied armies and countries, India shared, to the full measure of her



(Photo Klein and Peyer, Madras)

MEENACHEE TEMPLE AND "GOLDEN LILY" TANK, MADURA.

been self-supporting financially. It has borne the cost of all its wars, and has, on the other hand, rendered assistance to the rulers in wars waged beyond its limits. The destiny of India is thus linked indissolubly with Great Britain. Indeed, among the foreign dependencies of the British Crown none is of greater importance than India.

Who has not wished for some enchanted carpet on which to fly to the cloud-capped Himalayas, to follow the meanderings of the five great rivers of the Punjab, to see the natural beauties of the wonderful land and the relics of the splendour of the Mogul Courts, to journey along the magnificent highroads, and to watch the extraordinary varieties of people such as no other country can show? The magic carpet may soon be provided by

opportunities, in the travail brought in those tragic years to the homes of the subjects of the Crown in distant places. Amongst the remarkable phases of the great conflict that will go down in history as the most commendable in the annals of India was the spectacle of many thousands of the flower of India's soldiery fighting the battles of the Empire on the fu-lung fields of Hinders and the arid deserts of Mesopotamia, Egypt, and Africa.

Since that time the evolution of humanity has, of course, given a powerful impetus to democratic principles. It has disturbed also the sheltered atmosphere of placid contentment which had before marked the attitude of the bulk of the population of India. Government was not slow in appreciating these impulses. Recognising the reasonableness of the people's claim, it allowed them a liberal measure of political concessions in 1919.

After ten years' probation fresh privileges were promised. A Royal Commission has recently toured the country to investigate and report on the question of further reforms. In the dust and turmoil of controversy raging round the constitution of the Commission the main issues were, for the moment, lost sight of, but there seems little doubt that the labours of the Commission will result in further advance of the people along the path of freedom which is the heritage of all who come within the brotherhood of the British Commonwealth. With confidence, therefore, Great Britain and India may look forward to a solid union based on mutual esteem and appreciation of the problems inseparable from the government of the Great Dependency that is without parallel in its history and conditions, its people and potentialities.



DARJEELING FROM JELLAPAHAR ROAD, SHOWING SNOW-CLAD HIMALAYAS. [Photo Bourne and Shepherd, Calcutta]

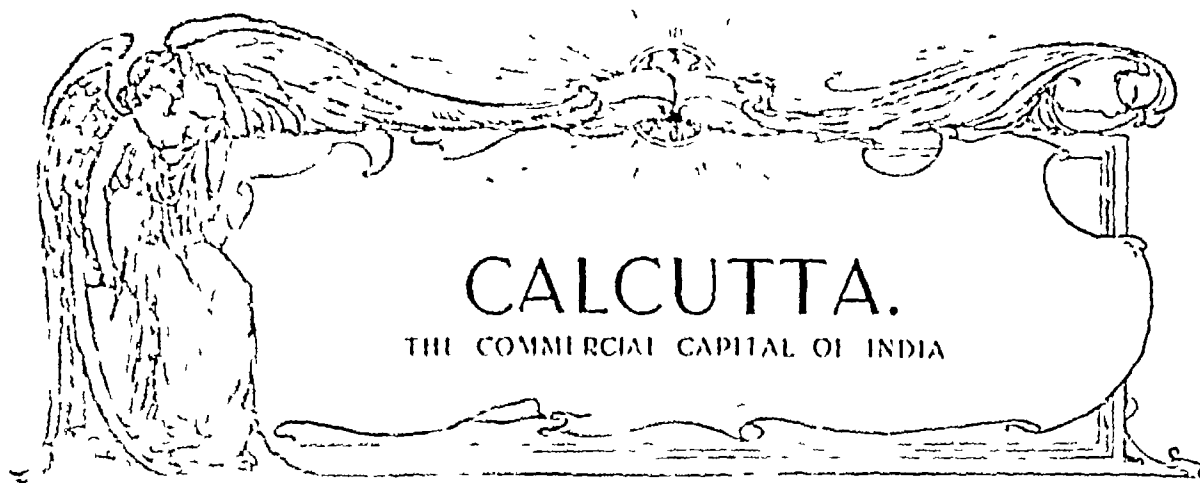


[Photo Bourne and Shepherd Calcutta



[Photo Johnston and Hoffmann Calcutta.

SHIPPING IN THE HOOGLHY RIVER, AT THE GREAT PORT OF CALCUTTA,
THE WORLD'S CHIEF CENTRE FOR JUTE AND THE SECOND CITY IN THE
BRITISH EMPIRE FOR POPULATION.



Approach by the Hooghly River



TO the experienced traveller on board a steamer nearing the head of the Bay of Bengal, the approach to the mouth of Hooghly River (up which, at a distance of eighty miles, lies the Port of Calcutta) would probably be indicated by the change in direction, and the diminution in force, of the currents met with, as well as by the increasing muddiness of the water, but, to one inexperienced, proximity to the delta of the Ganges would possibly be first revealed by the slow-

ing down of the ship's engines preparatory to taking on board a pilot at the Sandheads—for of the low-lying coast no sign, so far, would have been seen.

Ordinarily, in fine weather, the sighting of the vessel upon which the Hooghly pilots await the arrival of incoming ships as well as the advent of one of these skilled river men aboard is a pleasing and interesting incident of the voyage—that, and no more. It is, however, possible at this point to experience the wildest of weather—rain thick enough to obscure everything a couple of hundred yards away, high seas and tempestuous winds, which combined may have compelled the pilot vessel to seek shelter. Then for her the incoming steamer searches slowly and wearily, sometimes for many hours, while with siren blowing, her navigating officer, fearful of running upon a sand-bank, warily noses the vessel through the blanket of rain, and all on board are in a state of tense expectancy.

Those who have been through such an experience, have spent a night made sleepless by the siren's blasts, alternating with the shouts of the leadsmen reporting his perpetual soundings, with the never-ending fugue of the waters above and

below, seldom forget the Hooghly's mouth thereafter on the relief with which they saw the morning break with its promise of discovering the missing vessel and obtaining the services of a man who, even in such conditions, may be depended upon to know where the Hooghly has scoured a channel through the sand.

If the pilot's vessel is found it might his coming on board may be full of thrills. Away some five hundred yards or more a great ruddy flare glows upon the brig and is here and there reflected in the turmoil of the blackness between. Then what seems his cockle-shell of a boat is seen advancing over waves that alternately swallow it in their hollows, and shoot it through their crests, and when it nears the steamer it looks as though it will be smashed to pieces and everyone aboard it drowned. The screaming wind and rushing water make all voices inaudible, but a rope ladder shoots out into the inky space where, now thirty to forty feet below, now on a level with the steamer's bulwarks, the cockle-shell goes up and down, a figure jumps aboard, then another, and in a flash the boat is away on its return journey to the brig.

Many a mother witnessing such a scene has said "My boy shall never be a Hooghly pilot", but it is such work that makes fine men of sturdy boys, and the members of this great service are noticeable in Calcutta for their fine build and wonderfully healthy colour. With one on board, the steamer resumes her course northward, and soon the coast line is discoverable, like a scrubby growth on an unshaved chin, slowly increasing until it is possible to assert it is composed of trees, and then someone who has journeyed here before says "That bit to the right, which looks higher than the rest, is Saugor Island, we go to the left of it."

Saugor Island is scarcely distinguishable above the line of grey-green verdure, but it has, nevertheless, been celebrated in verse, for it is the scene of an annual pilgrimage by Hindus, and is the site of the traditional confluence of the Ganges and the sea. Until 1802, when the horror was stopped by order of the then Governor General, Marquis Wellesley, it was the place where many pilgrims immolated themselves by drowning or death in the

SEAPORTS OF INDIA AND CEYLON.

jaws of the crocodiles—That custom inspired John Leyden's poem which concludes

"Not all blue Gunga's mountain flood
That rolls so proudly round thy fane,
Shall cleanse the tinge of human blood,
Nor wash dark Saugor's impious stain."

So low lying is it that the cyclone of 1864 swept away three quarters of its inhabitants, but even that disaster pales before the record of the island of Hatia, at the eastern end of the delta, which, in 1876, was swept by a storm-wave 40 feet high, and lost 30,000 of its inhabitants—more than half its population.

The loss of the *James and Mary* in 1694, on the shoal since named after her, and of the *Anglia*, in the recollection of many still alive, of the *Sumatra*, which, sinking opposite to Prinsep's Ghat, caused the deep channel there to move from the western to the eastern bank, are well-known instances of its devouring capabilities, and the harrowing and well-remembered details of these catastrophes keep up its sinister reputation. Owing, however, to the great dredging operations carried on since 1907, the excellent river survey, and the skill of the Hooghly pilots, the voyage of the river has been rendered not only much safer



Old Court House Street

DAI
The beautiful

The Hooghly is one of the most dangerous and difficult rivers to navigate in the world. It is entered after passing Saugor. Its deepest channel runs, now on the eastern, now on its western, side, and its bed is a mass of shoals of varying height and area, some at their apex showing as islands, some forming bars which can only be passed when the tide is high, and this tide races in and out with incredible speed,

"And always underneath that heaving tide
The changing bottom runs, or piles, or quakes,
Flinging immense heaps up to wallow wide,
Sucking the surf ice into whirls like snakes
If anything should touch that shifting sand,
All the blind bottom sucks it till it sinks,
It takes the clipper ere she comes to land,
It takes the thirsting tiger as he drinks."

but possible for vessels of much greater draught than was previously the case. In 1857 only those drawing twenty-two feet or under were permitted passage. Now those drawing twenty-nine feet may pass this tortuous and difficult entrance to one of the world's greatest ports.

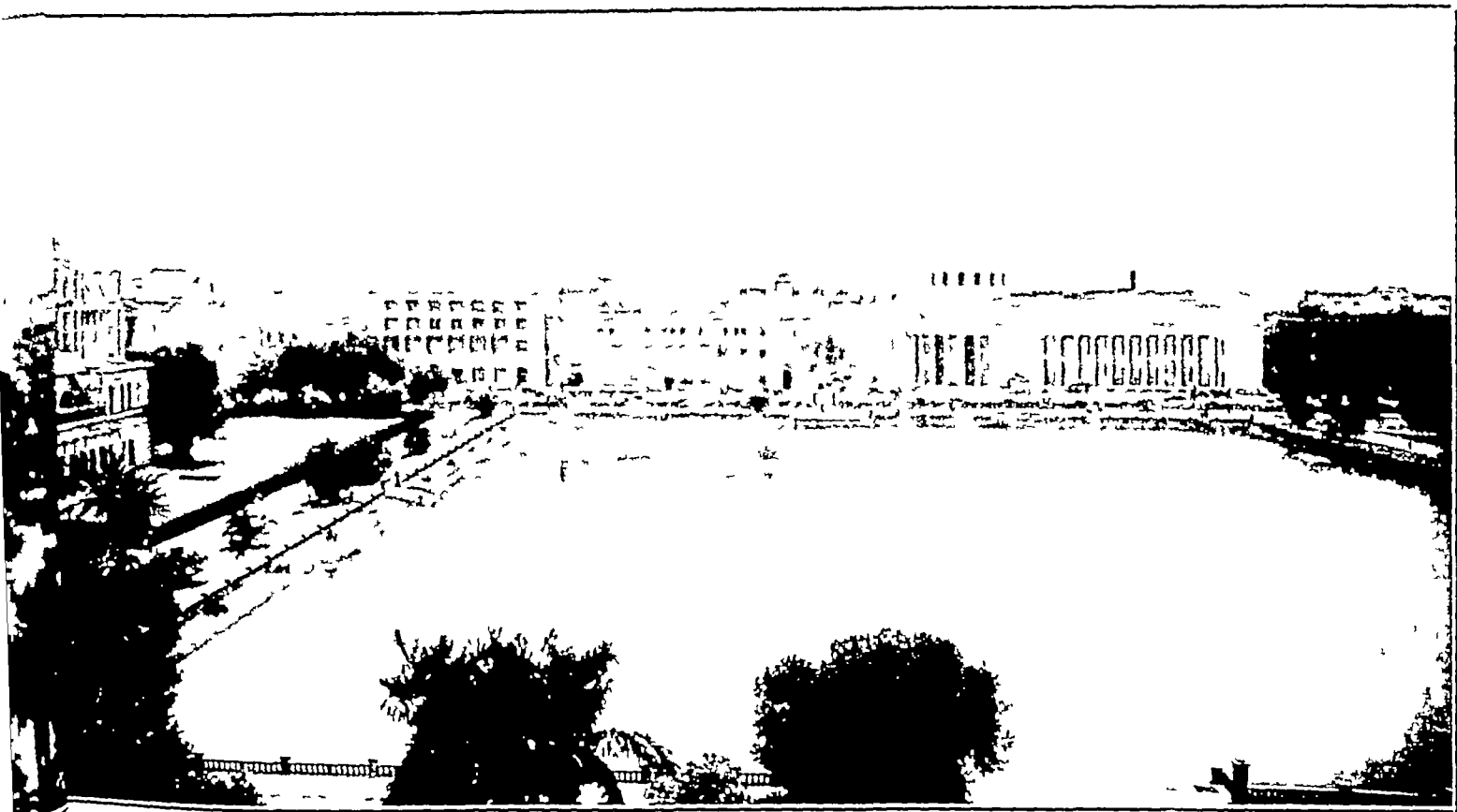
Notwithstanding all the care and skill devoted to the navigation of the Hooghly there is always potential disaster from miscalculation or circumstances in which it is often difficult and sometimes impossible to apportion the blame. Thus, on August 29th, 1927, the steamer *Calcutta*, carrying a crew of 71 hands all told, 7 passengers, and 8,380 tons of cargo, going up the river, collided with the outward-bound steamer *Rabelais* of about the same size, cargo tonnage, and number of crew, and, grounding below the central Fulta sand buoy,

became a total wreck although no lives were lost.

The obstructions to traffic which the river provides are occasionally liable to be accentuated by sudden and furious storms, and at greater intervals by devastating cyclones, furthermore when steamers have reached the port safely, and are snugly berthed, they are menaced and sometimes seriously damaged, by the advent of a bore, which, at every full moon and every new moon but especially at the time of the equinox, chases up the river at the first of the flood-tide with an appalling roar heard miles away, in a wall of water often twenty feet in height.

Not far thence on the upward journey one comes to Pulta, already mentioned, the point to which the refugees from the siege of Calcutta in 1756 fled and, but for the charity of the Dutch residents, would have perished from starvation, but it is not until Budge-Budge, with its great oil receptacles, is passed, and soon after the Royal Botanical Gardens, founded in 1786 by the East India Company, that a view of the port is obtained and some idea of its importance is realised.

Below this point the traffic on the river will have been confined to a few outgoing steamers, country



RE.
of Calcutta

General Post Office
(Building with Dome and Pillars)

[Photo Bourne and Shepherd]

The banks of the Hooghly are of a very uninteresting character. Sandbanks and jungle, both of unimpressive height, but the latter of great density, with clumps of palm-trees here and there, and showing little sign of human habitation, are all that is visible until nearing Diamond Harbour. Hereabouts are a few bungalows, and the mud and reed-covered huts of the people are evident. Here, too, if the tide does not serve, steamers have to wait for the next, and passengers endure perhaps their first attack from mosquitoes, which may spoil their enjoyment of a glorious sunrise or sunset, for at this point the river runs north-west to south-east, and on its broad bosom reflects the riot of colour in the sky, making the land a very minor factor in a sphere of wonderful chromatic harmony.

boats, and steam launches hurrying to the mills, but above it the surface becomes increasingly covered by these, to which are added the busy passenger steamers between the numerous city ghats, the great jute flats which lie like dead whales in the centre of the stream, having brought their cargo from the far-eastern portions of Bengal, the little tugs which always seem so busy, and the lesser green boats that always appear so slow. All these dot the river, while along the eastern bank lie, as though in silent disdain, the steamers in a long line surrounded by barges at their moorings, taking their rest after voyages from remote quarters of the globe, a line continuing until it is lost in the haze that hangs over Howrah and the great city to its right.

SEAPORTS OF INDIA AND CEYLON.

From the Botanical Gardens, at Sibpur, to Calcutta, the western bank of the Hooghly has upon it but one building of any architectural pretension. This is the structure erected in 1821, at the instance of Bishop Middleton, for the instruction therein of Indian and other youths in the doctrines and discipline of Christianity, and was for long called "The Bishop's College." The ecclesiastical institution was many years ago transferred to premises in Lower Circular Road, Calcutta, and the fine Tudor building at Sibpur has now most inappropriately become the Bengal Engineering College. The rest of the western bank until Howrah is reached is covered by the ship-building, timber, and coal yards inseparable from a seaport, and these are overtopped by the box-like structures of the great mills which lie behind them.

On the eastern bank, however, the points of interest are many. First will be noted the immense works in progress in the construction of the King Edward Docks, amongst the largest in the Orient. These have demolished the mansions once inhabited by Calcutta notables and the palace where the King of Oudh so long resided. Next will be observed the entrance to the existing Kidderpore Docks, marked by a clock-tower. A short distance higher up was at one time the Government Dockyard, now closed, and hereabouts are moored any vessels belonging to the Government which may be in port. The house embedded in trees, just to the north of the Kidderpore Creek, is that of the Port Officer. From here begins the Strand Road, which runs north for miles along the bank, and provides Calcutta with the venue where its elite drive in the evening, to "cat the air," as the Indian phrase goes. At that time it is crowded with cars of every size and kind. Before the steamer reaches the landing stage at Outram Ghat the traveller will be busy asking "What is that and that?" as successively come in sight the fine memorial tower in memory of the Lascars who lost their lives in the Great War (one of Calcutta's handsomest monuments), Prinsep's Ghat, erected in memory of a popular member of the Civil Service, and the spot at which for many years the great ceremonial landings in Calcutta of Viceroys and of Sovereigns were made, the last being that of King George in 1911, the ramparts of Fort William, with its lofty aerials, and the Gwalior Memorial (commonly called The Pepper-box) erected by the Earl of Ellenborough in 1847 in memory of the officers and men who fell in the Gwalior campaign of 1843 under the leadership of Sir Hugh Gough, which, notwithstanding the ridicule Calcutta bestows upon it, is a landmark that attracts attention and so fulfils its object admirably.

As the city of Calcutta lies well back from the river bank, no view of it is obtainable from the river, but the vessels that put it in communication with all parts of the world are seen at their moorings all along this eastern bank, from Kidderpore

to Howrah, not obstructing the view as did in former days the towering masts of the vanished sailing ships, but perhaps more indicative of the power and might of Commerce than were those crowded specimens of sea-beauty man has ceased to build.

Just at the spot where the long line of sailing vessels, three abreast, used to end, arriving steamers come to rest, and, swinging round with the tide, are brought in to the landing stage, where their passengers are put ashore close to the commanding premises of the Imperial Bank of India and almost under the shadow of the High Court of Calcutta.

Approach by Railway

Those who approach the city by rail from the north, i.e., from Bombay or Karachi, are generally, long before they reach Bengal, utterly tired of the monotony of the prospect of seemingly endless plain, sparsely sprinkled by trees, which is observable from the train, or of contemplating the interior of their carriage, should the journey be made in the summer, for at that season the sunlight and heated air are best excluded.

It is, therefore, with some surprise, when the train stops after a long run, at the French settlement of Chandernagore, in the first half of the morning, that the traveller, awakened by the stoppage, looks out and finds the little station surrounded by tall, thickly foliaged trees, through which the first glimmer of dawn is breaking, and that his ears are entranced by the chatter of an invisible and innumerable choir of birds. It is a delightful experience, and renders the arrival in Bengal thenceforth unforgettable, an impression that the freshness of the moist atmosphere, the luxuriance of the foliage, the prevalence of water in river, tank, and pool, with the increasing proximity of dwellings, varying in character from the mud hovel to the ornate stucco of the Rajah's garden house, combine to register in the memory.

The run from Chandernagore to Howrah provides no sight of more importance than that of the East Indian Railway Co.'s carriage and wagon works at Lillooah, and thence the great sidings announce the proximity of the terminus, which proves to be an uninteresting array of platforms at right angles to the front of the station, the latter being parallel to the river Hooghly and only some fifty yards from it.

Those who approach the city from the south, by the Bengal Nagpur Railway, have not the profusion of tropical verdure so lavishly unfolded to them, but the greenness of the well-watered country between Orissa and Calcutta is always refreshing. On this side more is seen of rice-fields, gardens for the supply of the city's need of vegetables, and the early train is laden with great baskets of fish from the small riparian villages. The line also passes over the Rupnarain River, one of the two tributaries of the Hooghly, to the incoming of which is due the formation of the *James and Mary* shoal. Close to the

city a view of a branch shows one of the miniature trains which connect it with outlying villages, and soon after is reached the same terminus that receives the East Indian Railway traffic at Howrah.

Howrah is a very busy station, and, when the mail trains arrive, the platforms, crowded with Europeans and Indians of all types and degrees, present a very animated scene. Before the train stops it is boarded by coolies clamouring for engagement to remove luggage to the conveyances which wait to take passengers into the city across the river, or if the bridge spanning the Hooghly is not open, to the ferry steamers kept for that purpose.

The bridge in question, just north of the railway terminus, is at nearly all times crowded with foot passengers and vehicular traffic, and from it an excellent view of the second city of the Empire is obtained. Extending along the eastern bank to the south, as far as the eye can see, are the lines of steamers at the jetties. In the background, now dark against the rising sun, the great masses of the General Post Office, the P and O offices, and the High Court are prominent, while away to the north the river takes a curve to the west, and is on both banks crowded with industrial establishments of various kinds. On the city bank bathing ghat after bathing ghat is alive with bathers young and old, male and female, grave and gay, all intent on their immersion in the sacred river.

Strand Road, giving access to the centre of Calcutta, is a thoroughfare of warehouses on the one side, and on the other of offices mixed with Indian shops, among which a temple may be observed. The road is narrow, paved with stone sets, and a tramline in the centre is not prepossessing, but progress along a short street connecting Strand Road with Clive Street leads to a wonderful transformation in the scene by palatial offices and the fine expanse of Dalhousie Square, with the imposing building which houses the Government of Bengal, St Andrew's Kirk, and the Post and Telegraph Offices prominent among the surroundings of its central garden and spacious sheet of water.

History

The history of the city begins in 1690, when Job Charnock, agent of the East India Company, chose it as the place in which to settle and trade with the people of the country.

The settlement grew quickly, and the name of Fort William, in honour of the reigning King of England, was conferred upon it in 1700. Little provision for its defence was, however, thought necessary, and what was sanctioned was provided in a very dilatory fashion, so that when in 1756 the Governor, Drake, gave shelter to a son of the Nawab of Dacca, whose wealth the Nawab Nazim of Bengal, Suraj-ud-Dowlah, coveted, and was requested to give him up and destroy the fortifications of Fort William, there were but barely 200 men to defend the post.

On Drake's refusal to comply with the Nawab's insolent demand, Suraj-ud-Dowlah attacked it with a force said to consist of 50,000 men, and soon drove the garrison out. Some escaped down the river to the Dutch settlement at Fulta, but 136 were made prisoners, and on the evening of Sunday, June 20th—one of the hottest nights of the year—were all crammed into a dungeon, "a cube of 15 feet" in size, where, without water or air, except what entered through two small grated windows, they succumbed one by one, and when the door was opened on the following morning only 23 were alive.

Watson and Clive, from Madras, re-established the occupation of the fort on the second day of the succeeding year after an engagement at Budge-Budge, and a week later Hooghly Town fell to an attack by Coote. War was shortly after declared between England and France, Chander-nagore being captured on March 22nd, and on June 23rd Clive fought the Nawab's army of 50,000 men, 1,800 horse, and 53 guns, at Plassey, with a loss of only 7 Europeans killed and 13 wounded, and of Sepoys 36 killed and 36 wounded, routed them and marched in triumph to the capital at Moorshedabad.

The succeeding incidents in the conquest of Bengal were the relief of Patna, besieged by Mahomed Gohur, by Clive, the defeat of the same Shahzada when he again invaded Behar in 1760, by Clive, and by Carnac about a year later, the second relief of Patna when besieged by Meer Kassi, by Adams, who found 150 English prisoners brutally murdered, and in 1764 the defeat of Suraj-ud-Dowlah at Buxar, by Munro, which resulted in the grant of the Dewani of Bengal, Behar and Orissa to the British by Shah Alum at Delhi in August, 1765, and the consolidation of their power in these provinces.

Calcutta was, in the latter years of the 18th century, nothing but a swamp, undrained, and close to a malarious jungle. It suffered grievously from successive epidemics, of which those of 1757 and 1762 were the most terrible, the latter being said to have resulted in the death of 50,000 Indians and 800 Europeans, while famine and pestilence in 1770, says *Hickey's Gazette*, accounted for 7,600 deaths in the city between July 15th and September 10th. "The very streets," writes Macaulay, "were blocked with the dying and the dead," and seafaring folk on leaving spoke of it as "Golgotha."

Little wonder, therefore, that those able to afford it, lived well away from it, as did Clive at Dum-Dum, Jones at Garden Reach, Chambers at Cossipore, and Warren Hastings, Francis, and Barwell, at Alipore—that to get rich quickly and enjoy life while it lasted was the desire of the Company's servants.

Their wholesale speculation and extravagance eventually caused Parliament, when renewing the Charter of the Company in 1773, to effect such changes in its constitution as would make "for

the better regulation of the British Territories in the East Indies," and these were coincident with the appointment of Warren Hastings as the first "Governor General of Fort William in Bengal." The way in which his efforts to reform the administration were rendered futile by the appointment of four members to his Council with equal authority to his own and the ensuing long quarrelling led by Francis, are well-known history.

It was well for Calcutta and India that Hastings was strong enough to outstay all his opponents,

The next Governor General, Sir John Macpherson, was too busily engaged in shaking the Pagoda Tree to do anything for Calcutta, but luckily his term of office was but a short one of twenty months.

Lord Cornwallis, who succeeded him, was already famous for his part in the American War of Independence, and soon had his hands full in India with the subjugation of Mysore and of the Mahrattas, but seems, nevertheless, to have interested himself in the old cathedral, for he pre-



[Photo Johnston and Hoffmann]

SITE OF THE BLACK HOLE, CALCUTTA

This historic place is inside the gate just north of the Post Office in Dalhousie Square. The tablet shown in the picture reads as follows: The marble pavement below this spot was placed here by Lord Curzon Viceroy and Governor General of India in 1901 to mark the site of the prison in old Fort William known as the Black Hole in which 146 British Inhabitants of Calcutta were confined on the night of the 20th June 1756 and from which 23 came out alive. The pavement marks the exact breadth of the prison 14 feet 10 inches but not its full length 18 feet about one third of the area at the north end being covered by the building on which this tablet is fixed.

to hold England's possessions in the East unimpaired, while in the West she lost America, Minorca, and Florida, to patronise in Calcutta the inception of the old cathedral and of the Asiatic Society of Bengal, and to see the administration of justice well established by the Chief Justice and Judges of the new Supreme Court.

He left the city in 1785 amid the acclamation of crowds of admirers, who escorted him to Saugor, at the mouth of the Hooghly, to undergo on landing in England the impeachment before the House of Lords which was his country's reward for the preservation of an Empire and the construction of a Government.

sided over its first vestry meeting, was present at its consecration, and was instrumental in conveying to it gifts of considerable value. His greatest achievement was that, given by the Court of Directors power to disregard the votes of his Council, he put down abuses and punished fraud, thus ensuring the purity of the services, the venality of which had been conspicuous. The Permanent Settlement and a settled and lucid code of civil and criminal procedure remained as monuments of his zeal in internal organisation.

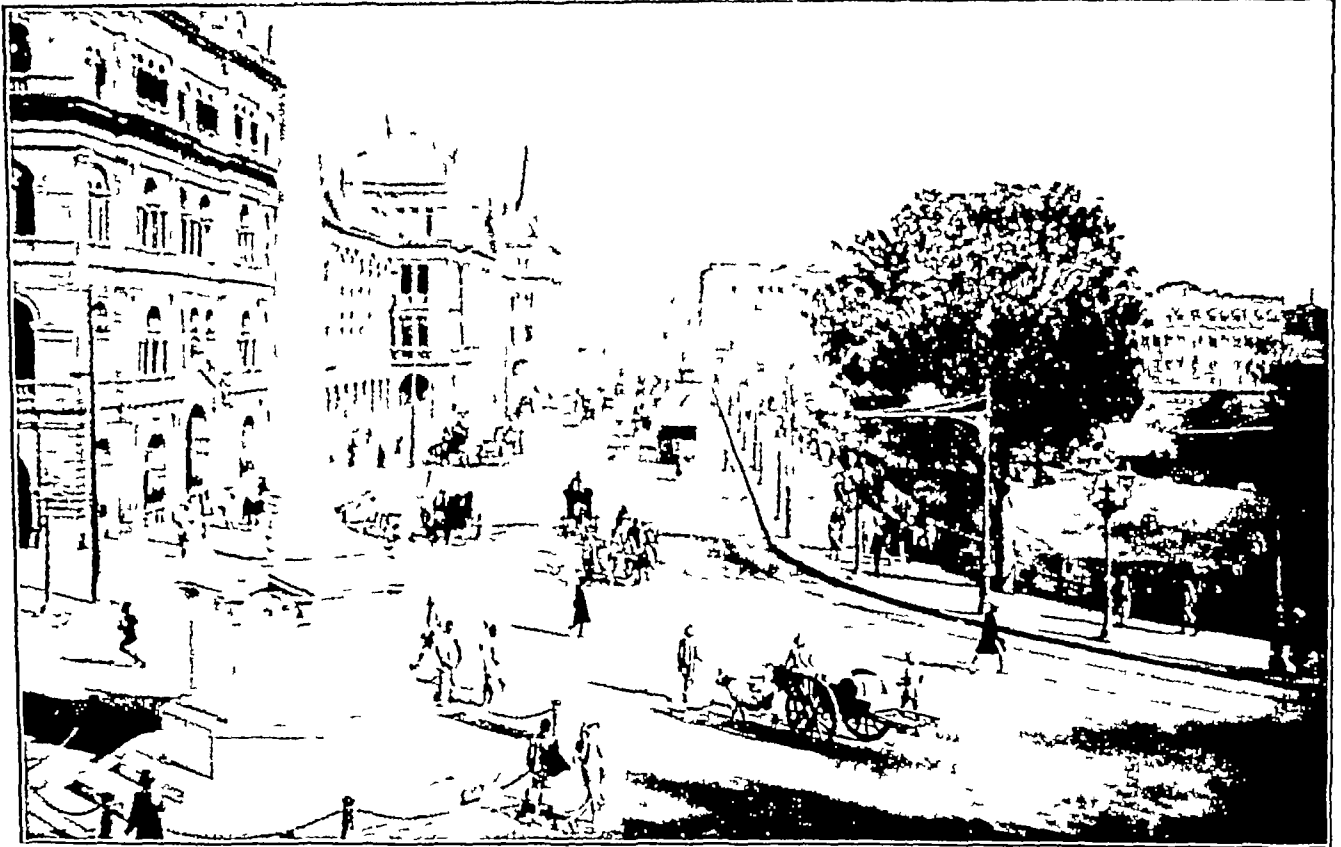
Sir John Shore, an intimate friend of Warren Hastings, followed Cornwallis, and during his term of office the "Zemindar," who had for

seventy years been the official in charge of "public order, conservancy, and health of the city and its suburbs," was shorn of this duty, and it was entrusted to "Justices of the Peace"; the first hospital was established, Municipal Government instituted, a regular assessment made, and the limits of the city and suburbs defined.

In May, 1798, the Earl of Mornington—better known as the first Marquis Wellesley, became Governor-General, and to him—perhaps as much as to any man, is due Calcutta's greatness—for he at once proceeded to erect a residence of a size he

the old cathedral was enlarged, and the Town Hall completed. His interest in the former has been commemorated by the erection in that sanctuary of a marble bust of him by Jennings, during the Viceroyalty of the Earl of Minto, 1905-10.

Lord Morda, afterwards Marquis of Hastings, succeeded to the office, and to him Calcutta owes the Strand Road, the avenues and paths across the Moolan, with many other amenities, for he formed a Lottery Committee whose efforts raised the funds for these improvements. He completed



DALHOUSIE SQUARE, CALCUTTA.

[Photo Bourne and Shepherd]

The obelisk on the left was presented to the city by Lord Curzon when Viceroy of India and unveiled by him on December 19 1902. It is a replica in white marble of the brief and plaster one originally erected by Zachariah Holwell, President of the Government Council in 1760 as a tombstone over the 123 victims of the Black Hole. At the corner of the neighbouring Collectorate to the west of the monument a marble tablet bears the inscription: "16 feet behind this wall was the entrance to the east gate of Fort William through which the bodies of those who perished in the Black Hole were brought out and thrown into the ditch of the ravine on June 21 1756." The names of the victims are engraved on the monument.

thought befitting the dignity of his office, and by his imperialism began that extension of British India to which became due the great expansion of the city's commerce. Had he had his way, there would also have been erected at Barrackpore a palace of generous dimensions, but the Court of Directors refused to sanction that project, and he was recalled in disgrace. He was, however, more fortunate than Warren Hastings. The great work of the Earl of Mornington in India was recognised thirty years later by the voting of a statue and a grant to him of £20,000.

The next Governor-General was the first Lord Minto, who became popular in Calcutta, where he ruled from 1807 to 1813. During that period

the conquest of Western India, and the campaign against the Nepalese added the hill country around Mussoorie and Simla to the Company's territory. The number of streets in the city named after his possessions, "Moirs," "Hungerford," "Rawdon," and "Loudon" Streets, record the gratitude of its citizens. He left India in 1823, and in the following year the portico now forming the entrance to the Dalhousie Institute was erected to protect a statue of him by Chantrey. The Institute itself was not erected until 1865.

The first years of the rule of Lord Amherst, extending from 1823 to 1828, were occupied by the first Burmese War, which added Assam, Arracan, and Tenasserim to the Eastern posses-

sions, again increasing the importance of Calcutta, but to him on the other hand was due the inauguration of Simla as the summer capital of India. The only memorial of him in the city is Amherst Street in its northern quarter.

To his successor, Lord W. A. C. Bentinck, the country owes steam communication, the abolition of suttee, suppression of thuggee, the introduction of English education, the foundation of the Medical College, the admission of educated Indians to the higher offices of State, and the removal of many restrictions on trade—a notable record for the first Governor-General of India, which title he assumed in November, 1834.

Sir Charles Metcalfe who followed him was Calcutta born, and incurred the censure of the directors for his action in freeing the Indian Press from vexatious bonds. He afterwards governed both Jamaica and Canada.

Lord Auckland who came next gathered around himself clever advisers in the persons of Ryan, Malkin, and Colvin, whose activities resulted in the sowing of seed which came to harvest in the time of Dalhousie, while to his sisters, the Misses Eden, the city owes the gift of the gardens named after them.

The tenure of office of Lords Ellenborough and Hardinge was marked by great military activity and added Scinde to the Company's sway, that of Wilberforce Bird, in the interregnum between them, was distinguished by the signature of the Act abolishing slavery in India.

Lord Dalhousie, assuming office in 1848 and leaving in 1856, left a marvellous record of benefits conferred: the penny post, the telegraph service, railways, public works, the opening of the Civil Service to public competition, and the institution of the office of Lieut. Governor of Bengal being among many results of his benevolent activity.

His successor, Lord Canning, had to meet the crisis of the great Mutiny, which he faced with coolness and determination. He left India in 1862 as its first Viceroy, its government having been transferred to the Crown in November, 1858.

Lord Elgin's Viceroyalty had little notable about it, and Lord Napier's was extremely short, but it is worthy of note that the latter, when a subaltern in 1838, constructed the road to and laid out the settlement of Darjeeling, the queen of hill stations and the sanitarium of Bengal.

During Lord Lawrence's rule, from 1864 to 1868, occurred the commencement of the summer exodus to Simla, the Bhutan War (which resulted in the annexation of the Dooars), the famine in Orissa, and the commercial crisis of 1866.

Lord Mayo's term was distinguished by the creation of an Agricultural Department, great increase in the facilities for communication, and in the number of colleges and schools. His assassination at Port Blair, in the Andaman Islands, barely six months after the murder of Mr. Justice Paxton had horrified Calcutta, ended the career of one who had become greatly be-

loved in the city, where he is commemorated by an equestrian statue and by the fine west window by Burne Jones in St. Paul's Cathedral.

Lord Northbrook had to contend with the Bengal famine of 1873-4, during which he refused to make the summer exodus to Simla, going instead to Shillong and Hazaribagh. His Viceroyalty was in 1875 made memorable by a visit of the Prince of Wales, afterwards King Edward VII.

Lord Lytton, the son of the novelist and the next Viceroy, had to face famine in Southern India and the Second Afghan War, but the latter being brought to a glorious conclusion by Sir Frederick Roberts, his term of office ended with the great Durbar at Delhi, where Queen Victoria was proclaimed Empress of India on New Year's Day, 1877.

His successor, Lord Ripon, contrived to make himself the Viceroy most disliked by the Europeans and the most admired by the Indian section of the citizens of Calcutta, by his introduction of the famous Ilbert Bill, and his extension of local self government.

A Viceroy of great popularity was Lord Dufferin, whose hospitality and wit, combined with the triumphant conclusion of the Burmese War, made his career in India a brilliant fragment of an exceptionally distinguished life.

Lords Lansdowne and Elgin followed without any great event to mark their sway, but to Lord Curzon came great opportunity, and to him Calcutta is indebted for the conception and completion of the fine Victoria Memorial, the re-erection of the Holwell Monument, and a general improvement in its Municipal government.

On the other hand, it is possibly due to his alienation of the Indian leaders during his last years in Calcutta that the agitation for reforms came into being, which, resulting in the Minto concessions and the removal of the capital to Delhi, lowered the prestige of Calcutta and removed from active participation in her affairs all future Viceroys after Hardinge of Penshurst in 1911.

The year 1869 is notable in the city's annals as the date of the first visit to India of a scion of the British Royal Family in the person of H. R. H. the Duke of Edinburgh.

In recent years royal visits have followed each other fairly quickly, namely that of the Prince of Wales (afterwards King Edward VII.) in 1875, when he opened the Zoological Gardens at Alipore, of the Duke of Clarence (1890), of the ill-fated last Czar of Russia as Czaritch in 1891, of the Prince and Princess of Wales in 1906, and as King George V and Queen Mary for their coronation as Emperor and Empress of India in 1911, of the present Prince of Wales in 1921 to open the Victoria Memorial, and of the King and Queen of the Belgians in 1925.

On all these occasions Calcutta has been prolific in its hospitality and profuse in its illuminations, for so decorated it most truly justifies its claim to be called a "City of Palaces."

Site of the Black Hole and its Vicinity

The public buildings which first attract attention in the city are those which crowd around the site of the old fort, the scene of the Black Hole tragedy. Covering a portion of that site is the handsome General Post Office, opened in 1808. It has two high stories, with huge pillars on the east and south and massive piers at either end, enclosing staircases. The angle forming the corner of Clive Ghat Street and Dalhousie Square is semi-circular, and is surmounted with a dome, which is one of Calcutta's landmarks. Standing on a high plinth formed by seven or more steps, the General Post Office is one of the best designed buildings in Calcutta. To Lord Curzon is to be attributed the fact that visitors can trace, by means of broad lines of brass sunk in the pavement of the plinth, and of the side walk, and by tablets in walls in the vicinity, the outline of the old fortress, and realise something of the strength of its walls. Two lines of twelve inches to the west of one tablet are all of it now remaining above ground. These originally formed a portion of the arcade inside the south curtain.

The site of the Black Hole itself is marked by a slab of black marble, above which is a descriptive tablet. These are inside the gate just north of the Post Office, in Dalhousie Square.

A tablet on the corner of the red brick office of the Collector of Calcutta, a little farther north, marks the position of the east gate, through which the bodies of the victims of the tragedy were brought and thrown into the ravelin ditch next morning. In the Custom House compound, in Clive Street, and Fairlie Place, the brass line continues, and in the quadrangle of the East Indian Railway House a tablet marks the position of the north or river gate through which Suraj-ud-Dowlah forced his entrance on June 20th, 1756.

Holwell's Monument to those who perished in the Black Hole was placed on the spot where their bodies were next morning thrown, and was erected before he left India in 1760. This was, however, removed (why, is not known) by the order of the Marquis of Hastings in 1821, and the spot remained unmarked until the present marble obelisk was erected by Lord Curzon in 1902. The original was of brick and plaster, the usual components of memorials in Calcutta's early days.

The corner of the Bengal Government offices nearest to this memorial covers the ground occupied by the first church erected in the city—St Ann's, consecrated in 1709. Its steeple fell in the earthquake of 1737, and the church was demolished by the forces of Suraj-ud-Dowlah in the siege of 1756. The Government offices in Dalhousie Square are called Writers Buildings because a range of quarters for Writers to the Government used to occupy the land immediately behind the façade of the present structure, and Lyons Range, at the rear of it, is reminiscent of the first ostensible purchaser of that land. Writers Buildings extend along the whole

northern side of Dalhousie Square, and were erected during the Lieutenant-Governorship of Sir Ashley Eden, 1877-1882.

Clive Street, running from the north-western corner of the square, contains many interesting spots. The premises of Messrs. James Finlay and Co. cover the ground occupied from 1775 to 1808 by "The Theatre," which was the ballroom of the settlement, and the scene of State receptions and public functions of all sorts.

The Bonded Warehouse, opposite to what is now Exchange Place, was the residence of the famous Begum Johnstone, the widow of four husbands, among whom were a Governor of Calcutta and a Senior Member of Council. She lies buried in the cemetery of St. John's Church, and on her tomb is a monument in the form of a Grecian shrine.

The impressive building forming the Royal Exchange and the Bengal Chamber of Commerce, at the corner of Exchange Place, replaces that which was the residence of Clive, and, later, of Francis.

The lake in the centre of Dalhousie Square was for many years the source of the drinking water of the settlement. It was dug and railed round some time before 1770, and its waters only ceased to be consumed on the installation of the municipal water supply at the beginning of the nineteenth century.

St. Andrew's Kirk, at the north-east corner of the square, stands upon the site of the old Court House, and gives this name to a portion of the fine street running directly south and continuing as a road across the Maidan to Kidderpore. In the old Court House the judges of the Supreme Court sat from their arrival in 1775 until 1784, when they moved to the "New Court House," which was where the present High Court stands. The old Court House was finally pulled down in 1792. The foundation stone of St. Andrew's Kirk was laid in 1815 (St. Andrew's Day), and the useful clock in the tower dates from 1835.

The police building at the north-west corner of Lower Chitpore Road and Lall Bazaar occupies the ground where once stood the pillory, and on the opposite corner in 1753 was the jail.

No. 1 Mission Row, near here, was the residence of Monson, the supporter of Francis, and No. 8 of another member of Hastings' Council, General Clavering, who died there in 1777. Mission Row was the "Rope Walk," and formed the eastern boundary of Tank Square (now known as Dalhousie Square), the scene of furious fighting during the siege.

The telegraph and currency offices at the south-east corner of Dalhousie Square are imposing buildings, but are of comparatively recent date.

Government House and Vicinity

Government House, standing within grounds about six acres in extent, to which six gates give entrance, owes its construction to Lord Wellesley,

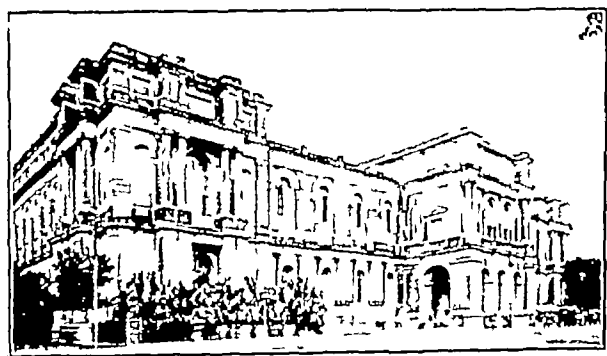
of Moorington as he then was. It was opened on May 14th, 1802, the anniversary of the fall of Seringapatam, and was thenceforward the residence of the Governor-General until the transfer of the capital to Delhi. It is a large but not very imposing building of the Queen Anne type, and



[Photo Johnston and Hoffmann]

GOVERNMENT HOUSE, CALCUTTA

though a great improvement on the previous residence of the representative of the King, was in the later years of the Viceroy's occupation found much too small to accommodate his guests in the cold season, when the lawns to its north were generally covered with tents for that purpose. The durbar-hall and the bill-rooms, which occupy the central block (from the corners of which four wings project) are large and noble, but the living rooms in the wings are, in comparison, extremely small, and few in number. In the north-east wing met for many years His Excellency's Council. In the south-west wing was his private room, in the south-east was the private drawing-room of Her Excellency, while the north-west wing and the upper chambers in the others provided quarters, which a very small house party filled. The decorations, mainly of white and

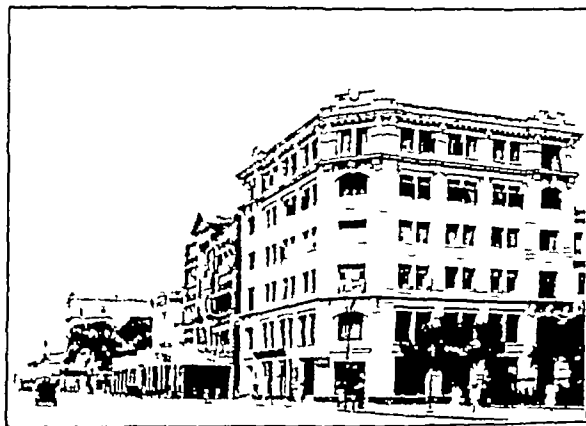


[Photo Johnston and Hoffmann]

CALCUTTA MUSEUM

gold, immense chandeliers for lighting, fine portraits and tasteful furnishing, made the great reception rooms a fitting background for the levees, drawing rooms, and State balls which took place within them, representing the beauty, valour, brain, and fashion of the day. The silks and satins of the ladies' dresses, the brocades and kincobs of the rajahs and their wives, the varying tones and colours of the civilian and military uniforms, and the glitter of innumerable jewels,

formed a wonderful kaleidoscope, changing with every movement of its parts and contrasting finely with the statuesque figures of the men of His Excellency's bodyguard standing immovably around. But this glory has departed. The fine portraits, as well as everything else that was thought good enough to send to Delhi, were, without any consideration of the associations connecting them with Calcutta, ruthlessly transported to the new capital, without the slightest reference to Calcutta opinion. If the Marquis of Wellesley's portrait could have spoken one wonders what it would have said of this spoliation of the mansion its subject had originated, and its own transfer to a sphere to which he was a stranger. The establishment is, of course, still the residence of the head of the Government in Bengal, and that which his predecessors, the Lieutenant Governors occupied, "Belvedere," at Alipore, has become the principal guest house of



[Photo Johnston and Hoffmann]

CHOWRINGHEE, CALCUTTA

the Government, and accommodates the Viceroy on his yearly visit to the city for Christmas.

In the gardens of Government House are several interesting pieces of ordnance. In the south is a brass 32-pounder taken from the Sikhs at the battle of Aliwal, flanked by two howitzers of the same material, captured at Seringapatam. On the north is an iron gun on a carriage in the form of a dragon, captured in China and set up here by Lord Ellenborough in remembrance of the Peace of Nankin in 1842. There are also other brass guns, on one of which is inscribed *Meeanee Hyderabad*, which recalls the victories of Sir Charles Napier and the annexation of Scinde. On the other gun is *Ghuznee Cabul*, commemorating the valour of Pollock and Nott in the second Afghan War. This latter gun was strangely originally a Dutch one, for upon it can also be read "Assuerus Koster me fecit, Amstelredam 1630," with the representation of a sailing ship and the Dutch Company's monogram V O C. In the garden to the west are the latest additions, two German guns.

At the northern gate are posted, during the time the Governor is in Calcutta, two mounted sowars of his bodyguard, an innovation dating from the accession of the present sovereign, when the northern and southern gateways were remodelled.

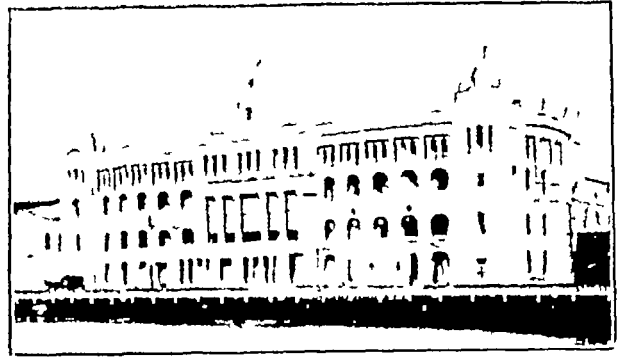
The saddest episode connected with the mansion was the lying-in-state of the Viceroy, Lord Mayo, after his assassination at Port Blair, in the Andamans, and certainly one of the gravest it has seen was the ball given in honour of the Prince of Wales in 1921.

Almost immediately opposite to the north gate of Government House is the building now occupied by the offices of the Red Cross and St. John's Ambulance Societies, which, in 1871, formed the shop of Messrs. Thacker, Spink and Co., the booksellers, and into a back room of this building was carried the body of the acting Chief Justice, J. P. Pixton, who was mortally wounded on the northern steps of the Town Hall (then being tem-

humidity and heat render tempers greatly inflammable.

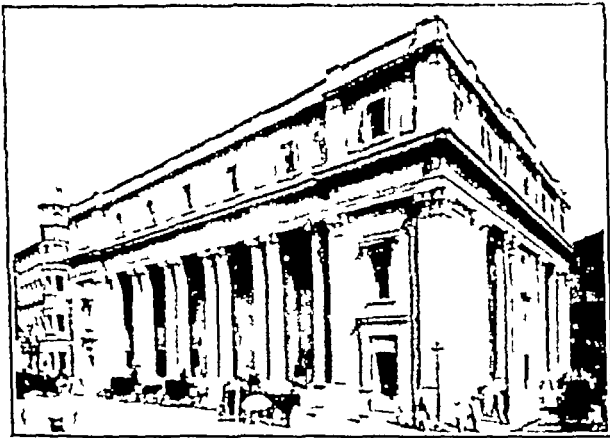
Town Hall and High Court, etc.

On Esplanade West, which runs from the western gate of the compound to the river, are the



[Photo Johnston and Hoffmann]

BENGAL CLUB, CALCUTTA



[Photo Johnston and Hoffmann]

ROYAL EXCHANGE, CALCUTTA

porarily used by the High Court) by a Mahomedan fanatic on the morning of September 20th of the year mentioned.

Beside the western wall of the block in question is Fancy Lane, a corruption, it is supposed, of *Phansi* (a gallows), and the location of that instrument of correction in the early history of the city.

From the north-west corner of the Government House compound to the river runs Hastings Street, so named because the house which, until some years ago was used as the offices of Burn and Co., was in 1777 occupied by Mrs. Imshoff, who became the second wife of Warren Hastings, and there they lived for some years after their marriage.

The corner of Esplanade Mansions, overlooking Government House on the east, covers the site of Hastings' office, while Council House Street to the west, is so called because the Council House in 1758 stood on what is now the western portion of Government House compound, wherein a Member of Council, Stanlake Batson, struck Warren Hastings in the face at a Council meeting on June 9th, 1763, a period of the year when

Town Hall and the High Court. The former, an imposing Doric structure, has a fine flight of steps leading to its southern portico and is of two storeys. The lower floor is now almost useless, a large part of it being occupied by the ponderous beams employed to support the upper storey, which has long been considered in a dangerous condition, but is the only one in constant use. Originally covering an area of 172 feet long by 65 feet wide, it was divided into a centre room and two side aisles by a double row of pillars, with a music gallery at the western end and a platform at the eastern, while on the south were three rooms, the centre one much larger than the others, and in it for many years the meetings of the Corporation of Calcutta were held. The great hall was also used for public meetings, dinners, concerts, and balls, but when the building was



[Photo Johnston and Hoffmann]

HASTINGS HOUSE, ALIPORE

taken over by the Government of Bengal for the use of the Legislative Council, the spaces between the pillars were filled up (save between two on each side for a necessary passage) and the enclosed area now resounds only to the eloquence of the members of that important body.

In the outer aisles and in the vestibule on both floors are a collection of portraits in oil and busts in marble of Calcutta worthies. One statue, a seated figure of Maharaja Rama Nath Tagore, by

Geslowski, in the semi-darkness of the lower floor, deserves a better site. These are the property of the Calcutta Corporation, as well as the portrait of Warren Hastings which dominates the Council Chamber. Those of Their Majesties King Edward and King George and of the Governors, Lords Carmichael and Ronaldshay, therein are the property of the Council.

Until the completion of the Victoria Memorial, the southern portico of this hall sheltered Westmacott's statue of Warren Hastings, and hidden in the gloom of the western end of the lower floor stood Bacon's colossal one of Cornwallis. The hall was indeed primarily built to house these statues, being designed in 1804 during Lord Wellesley's regime. It was, however, an unconscionably long time in construction, for it was not completed until 1813.

Farther along Esplanade West stands the High Court of Calcutta, one of the city's finest buildings. In the Gothic style, it is the work of Walter Granville, Government architect of the time, and is generally considered to have been inspired by the Town Hall at Ypres destroyed in the Great War. The foundations were laid in 1864, and the building was completed in 1872. The fine tower in its centre is 180 feet in height. The structure has in recent years been extended towards the north, and now contains ten courts. In the centre is a fine quadrangular garden with a fountain overlooked from an inner corridor of the first floor, the south-east corner of which was the scene of the assassination of a Mahomedan police officer by a Hindu during the spasm of anarchical activity some twenty years ago. The officer was shot in the back when approaching the head of the south-eastern staircase, down which the murderer ran, and was arrested by the police on guard at the eastern gate.

The judges' library and the courts contain fine portraits of judges who have made history, while the barristers', valuers', and pleaders' libraries have those of prominent practitioners of these grades. The historical student should not miss seeing them.

On Esplanade East, the other side of Government House, and half way to Dhurumtollah Street, is the building erected during the Viceroyalty of Lord Curzon to accommodate the military and foreign offices of the Government of India. Designed by the late W. Banks Gwyther, F.R.I.B.A., it is perhaps best described as in the Renaissance style, but is not successful, its flanking towers dwarfing its centre. It has, however, some fine rooms, and now houses the Imperial Library and various offices of the Provincial Government.

A hundred yards beyond, at the corner of Dhurumtollah Street, stands the finest Mahomedan building in the city—the mosque built and endowed in 1842 by Prince Gholam Mahomed, son of Tippoo Sultan. The handsome character of the building well deserves its present prominence through the operations of the Improvement Trust

in clearing away the petty shops which formerly surrounded it. The inscription over the entrance door naively states that it was erected "in gratitude to God," and in commemoration of the Honourable Court of Directors granting Prince Gholam Mahomed the arrears of his stipend in 1840—an instance where, on one occasion, at least, the proverbial procrastination of the East served some useful purpose.

The Maidan

The Maidan, or "Plain," of park-like land, which stretches from Government House for a distance of two miles to the south, and is almost the same in breadth from the Hooghly to Chowringhee, by which it is bounded on the east, is the great lung of Calcutta and jealously prized by its citizens. An example in the latter connection occurred when Lord Curzon proposed the erection of the Victoria Memorial on a site near to Government House. Such a cyclone of protest arose that the Viceroy immediately discarded the idea, and contented himself with the position occupied by the old Presidency jail, at the opposite end of the pleasure, which met with universal approbation, for the jail was an unsightly building, surrounded by gloomy trees, a grim reminder of the punishment awarded for crime, which depressed the most virtuous, as they passed it during their evening drive, with visions of what law breakers were enduring and what adverse circumstances and temptation might yet provide for themselves. Lord Curzon's withdrawal is the more creditable to him from the fact that the whole of the Maidan is considered an appanage of Fort William, and is entirely controlled by the Government.

One of the most frequented sheets of water upon it in former days was close to the jail and known as the Serpentine Tank, the scene of the activities of a model Yacht Club, the delight of children, a joy which is now theirs much closer to the centre of the city, for a resuscitated club sails its model craft upon the General's Tank, opposite to the Bengal Club.

The great section of the plain, south of the Outram Road and east of the Casuarina Avenue, is the parade ground, where yearly the garrison parades on Proclamation Day. Enormous pavilions for accommodation of guests were erected there on the occasion of the pageants staged for the entertainment of the Prince and Princess of Wales in 1876 and the King and Queen in 1911. On these occasions all the provinces of India, Nepal, and Sikkim, provided items of the programme, and illuminations were general over the whole extent of the Maidan, with elaborate displays of fireworks when darkness fell.

The north-eastern section, around the Ochterlony Monument, was the site of the great charity fete organised by the Countess of Minto when Abdur Rahman, Amir of Afghanistan, was in Calcutta, and Lord Kitchener was Commander-in-Chief in India.

The glens of Fort William and the section west of the Red Road has on several occasions been the venue of military tattoos of great extent and variety, is also the space within the race-course, which is the scene of the annual polo tournaments that draw competing teams from all over India and their admirers from the most distant provinces, to witness their prowess in India's finest game. Different sites on the Maidan have served as landing grounds for aeroplanes engaged in the various long distance flights, and aviators of many nations have on it received enthusiastic welcomes and been speeded on their way.

In addition to the space allotted to racing, the Maidan provides grounds for many cricket, tennis, hockey and football clubs, some of which, notably the "Calcutta" and "Dilhousie," provide creditable seating accommodation in great stands around their grounds.

In the morning the extensive area is used by riders, golfers, (the "Calcutta" and "Ladies" Clubs have club-houses and courses upon it) pedestrians, and as a grazing ground for cattle. In the evening it is the resort of thousands of every class for exercise and sport, while on Queensway, to the north of the Victoria Memorial, numbers of cars line the road so that their occupants may enjoy whatever breezes blow and exchange civilities with each other or their pedestrian friends.

Cyclones and nor-westers have often played sad havoc with its avenues and clumps of trees, but this is rectified as quickly as Nature admits, and the Maidan is always a green and gracious expanse upon which the citizen may find company, amusement, or should he prefer it, solitude.

The other open-air resorts are the Eden Gardens, the Zoological Gardens, and the Royal Botanical Gardens at Sibpur. The first of these were the gift of the Misses Eden, sisters of the Governor General, Lord Auckland, and provide pleasant paths and seating accommodation on the banks of ornamental waters, where the lotus flourishes in abundance and towering trees frame charming vistas. Here

"Young leaves grow green on the banyan twigs,
And red on the peepul tree
The honey-birds pipe to the budding figs,
And honey-blossoms call to the bee
Poppies squander their fragile gold
In the silvery aloe-brake,
Coral and ivory lilies unfold
Their delicate lives on the lake."

The north-eastern quarter of the Eden Gardens provides ground for Calcutta's cricket and athletic fixtures, and the courts which witness the contest for the tennis championship of Bengal. On their western side is a large turfed promenade with a bandstand now seldom occupied, and at their northern end stands a most picturesque Burmese pagoda brought from Prome after the Burmese War of 1854, on the topmost pinnacle of which there was for many years a reversed beer bottle,

placed in position by a humorous and agile sailor. Around the entire gardens is a broad grass ride, delightfully shaded, for equestrians, but little used.

Fort William.

Fort William stands where the village of Govindipore lay, separated from that of Chowringhee by a tiger-hunted jungle, which, after being cleared, became the beautiful and spacious Maidan. The stronghold was designed by Captain Brohier, Chief Engineer of the East India Company at Madras, and was built to replace the smaller and inadequate one of the same name that was the scene of the Black Hole tragedy already described. It was commenced in 1758, and completed in 1773. The long time taken in its construction was because of the difficulty in obtaining labour and the procrastination of the contractors for the supply of material. It is said to have cost £2,000,000 sterling, of which five lakhs of rupees went for the fixing of piles to prevent erosion by the river. The latter amount was wasted as the Hooghly proved the erratic nature of delta streams by receding instead of advancing. Thirty years after Fort William was built Lord Valentia wrote of it—"The citadel of Fort William is a very fine work, but greatly too large for defence." It was designed to accommodate 15,000 men, and mounted 615 guns.

About twenty years ago guns of great calibre were still mounted on the most exposed bastions, including some weighing ten tons, but neither their capabilities, nor those of the lesser ordnance, have ever been tested. No shot has ever been fired from the fort nor at it.

Its form is that of an irregular octagon, five sides of which face landwards and the rest toward the river. Over the Treasury Gate are quarters reserved for the Commander-in-Chief in India, and above the other gates there is similar accommodation for the General Commanding the Presidency District, and the Chief Staff Officers of the garrison. Barracks of four storeys, with fine parade grounds, are arranged for the troops.

Fort William has seven gates, named as follows: the "Calcutta," "Plassey," "Chowringhee," "Hospital," "St George's," "Treasury," and "Water" Gates. The garrison usually consists of one European and one Indian infantry regiment, with one battery of garrison artillery.

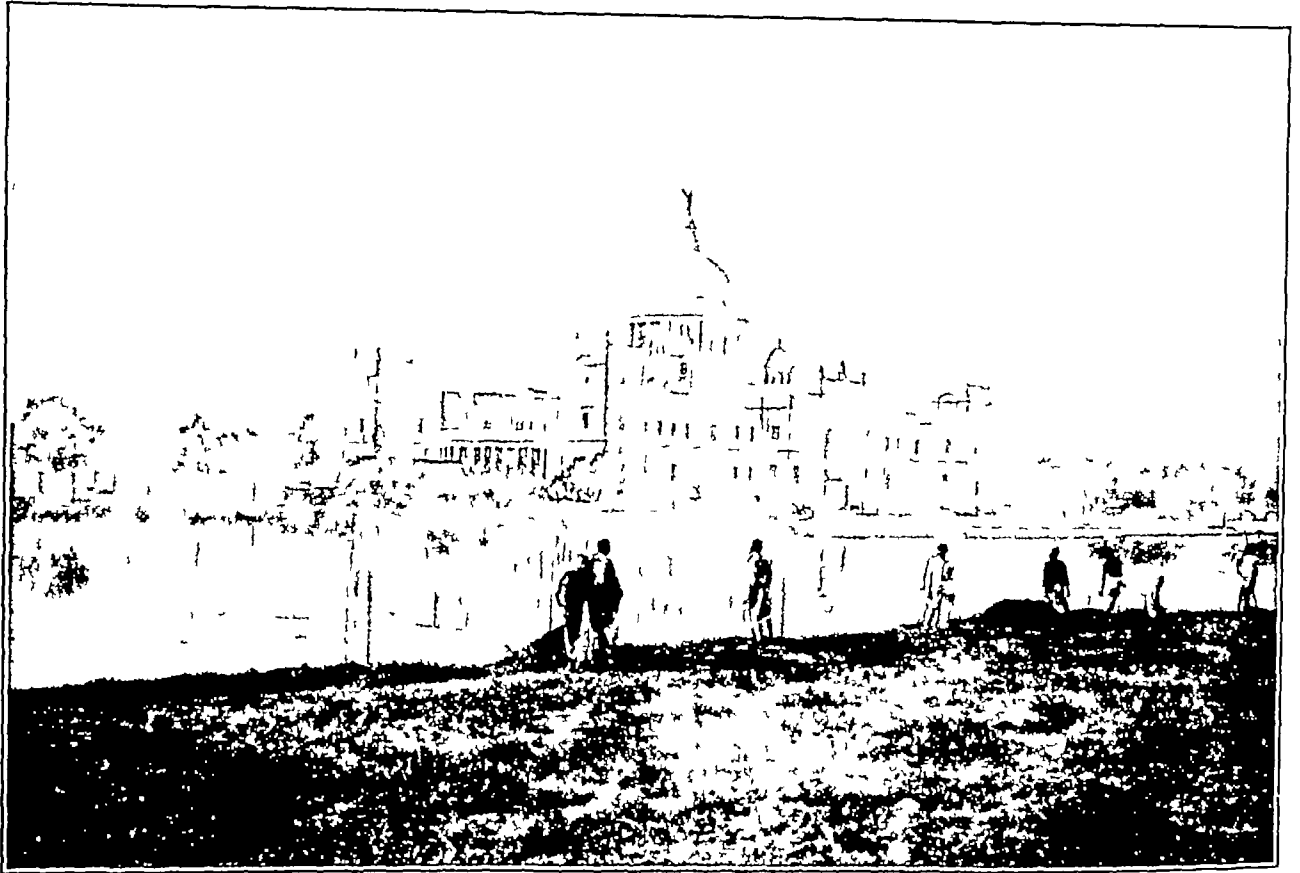
Fort William was in Cornwallis' time the residence of the Governor General, hence his designation "of Fort William in Bengal", and it was to the building now used as a Soldiers' Institute and Garrison School, that the last King of Oudh, Wajid Ali Shah, was brought on his deposition in 1856. He remained there for three years, after which he was transferred to the palace at Garden Reach.

The Granary Barrack and the Arsenal are two of the sights of the fort. The former was erected

by Warren Hastings to store 70,000,000 maunds of rice and paddy to provide against famine, and has walls 5 ft 3 in thick, while the whole structure of brick in line measures 127 ft by 90½ ft and is 25 ft in height.

The Arsenal is full of trophies and relics of bygone days—captured guns from Kandahar, Tibet, Seringapatam, Persia, and even Spanish guns with the crown and name of Philip V upon them, old colours of regiments deposited for safe custody and many captured from enemies,

lakhs of rupees were voluntarily subscribed for it by the princes and the people of India. King George V, when Prince of Wales, laid the foundation stone in January, 1906, and his son, the Prince of Wales, opened the building during the Governorship of Lord Ronaldshay in December, 1921. It is a magnificent structure of polished white marble obtained in Jodhpur State, its great central dome being surmounted by a bronze figure of Victory 16 feet high and weighing 3 tons, which revolves in the wind on a 2-foot base 182



VICTORIA MEMORIAL, CALCUTTA.

[Photo Johnston and Hoffmann]

together with a great collection of war weapons of all sorts, of uncommon interest.

The foundation stone of the garrison church of St. Peter was laid in 1822, and its consecration ceremony performed in 1828. The church is said to resemble the chapel of Trinity Hall, Cambridge. It contains numerous memorials of military men who have done notable service in India from 1840 to the present day.

Victoria Memorial

Calcutta's greatest building is the Victoria Memorial, which stands west of the Cathedral, in extensive grounds, upon the site of the old Presidency jail. Due to the conception of Lord Curzon, its design was entrusted to Sir William Emerson, and funds amounting to seventy-six

feet from the ground. The dimensions of the whole Memorial are 339 feet by 228 feet.

The ornamental water in front of the Memorial to the north is crossed by a bridge, upon the centre of which is Frampton's statue in bronze of Queen Victoria, while outside the grounds on Queensway stands the imposing statue of its originator, Lord Curzon.

The interior of the building is impressively designed, but it seems incredible that the architect is responsible for some of the details, such as the chess-board paving of the plinth with black and white marble, the use of the same material in the atrocious designs of the inner floors, the introduction on the interior base of the dome of coloured paintings illustrative of Victoria's reign, and sundry other elements discordant with the memorial character of the edifice. It is already

crowded with exhibits of paintings, statuary, documents, prints, clothing, and furniture relating to the Victorian period, and the intention of Lord Curzon that it should be used for large assemblies, dinners, and even levees by the Governor or possibly the Sovereign, seems with his passing, to have been forgotten.

The exhibits can only be briefly alluded to, but visitors should not miss the prints and models of old Calcutta, nor the historic documents section. They cannot fail to observe the fine figure of the young queen under the centre of the dome, in marble by Sir Thomas Brock, nor the works in the same material, in the outer courts to the east and west, of Cornwallis, by John Bacon, and of Warren Hastings, by Westmacott.

The finest picture in the collection, Verestchagin's "Entry of the Prince of Wales into Lapur" also cannot be overlooked, measuring, as it does, 274 by 196 inches.

To the south of the building is the King Edward VII Memorial Arch, which supports an equestrian statue of that monarch in bronze by MacKinnon.

Other Monuments, Statues, etc

The most prominent memorial in Calcutta to a public man is undoubtedly the one which, from the north-eastern portion of the Maidan, towers in the form of a single column to the height of 152 feet, and is commemorative of General Sir David Ochterlony, who defended Delhi in 1804 against Holkar's 20,000 men and 100 guns, until relieved by Lake, and, twelve years afterwards, defeated the Ghurkas, adding Naini Tal, Mussoorie, and Simla to British possessions. He was an American loyalist who went East without friends and fought his way to the front. When Heber and he met in Rajputana, Ochterlony had not left India for fifty-four years. He died at the age of sixty-eight at Meerut. Every visitor to the city observes his memorial, and asks its meaning, so it admirably serves its purpose.

The Ochterlony Monument is said to be a reproduction of a column in Syria, to which is added an Egyptian base and a Turkish cupola. The structure is of brick surrounding a winding staircase of Chunar stone, and from the gallery at the top, to which this gives access, a great panoramic view of the city and its environs is obtainable.

Scattered over the city's open spaces, particularly along the Red Road, in Dalhousie Square, and around Government House, is a collection of statues in marble and in bronze that make Calcutta perhaps the most bestatued city in the British Empire. Their artistic value varies very considerably, but the donor's intention being in every case the same, to do honour where it was conceived due, they are rightly given equality of treatment in respect of the sites allotted, irrespective of their aesthetic success. The one, however, which by common consent is the finest, and which art critics characterise as

"one of the great equestrian statues of the world," is that of Sir James Outram on the grass plot opposite to Park Street. The work of J. H. Foley, R.A., it was erected in 1874, and unveiled by Lord Napier of Magdala, who is himself commemorated by a miserable specimen of the work of Sir Edgar Boehm, R.A., at Prinsep's Ghat, on the river bank.

The Outram statue is a vigorous presentment of a great personality reining up his spirited charger, while, sword in hand, he glances to his right. Man and horse are superbly modelled, and on holidays crowds of awe-stricken Indians gaze on them. The figure of the man is bareheaded, an artistic convention, which the comparative failure of all hatted statues justifies, but which has given rise to the following dialogue among the Indians.

"What is he looking round for?"—"Idiot, can you not see? His hat has fallen off."

The statue has of recent years been subjected on two occasions to outrage, the sword being broken off short of the hilt, on the last occasion, by a mentally afflicted Indian, who had mounted behind the human figure and was observed, by a mounted police officer, urging the bronze horse to action.

The statue of Lord Napier of Magdala is, as already indicated, an uninteresting equestrian work, the General in uniform, with binoculars in his outstretched right hand, and rather craning to observe something in the distance. He is made ridiculous by the fact that his horse appears equally desirous of seeing the object, and has its near hind hoof with its front rim only upon the ground, while the modelling of the creature suggests that it, too, is in uniform.

Taking the statues on the Red Road from south to north, that of the Marquis of Dufferin, a standing figure, by Boehm, is satisfactorily characteristic and a good likeness of a brilliant and distinguished Viceroy.

On the eastern side of the road stands Sir Goscombe John's figure of Lord Ripon. The short, stout figure of that Viceroy (beloved of the Indian community) is, in its position here, a failure. It should have been placed in a garden where its resemblance to a gnome of the Katskills would not be so pronounced as it is on the Maidan's wide expanse. Its truth and its workmanship are good, but its diminutive stature is its undoing.

Farther north, on the west, is an equestrian statue of Lord Kitchener which is a libel on that great soldier. It looks like a weedy draper's assistant dressed up to masquerade as a General, and totally fails to depict the massive frame and great intellect of Kitchener of Khartoum. The horse on which the figure is seated is of the poorest type.

Next to the Kitchener statue is a much finer one of Lord Roberts on his favourite charger. The figure of "Bobs" in a poshteen is good, but the horse is a failure, for his fore feet are planted

firmly, while his hind quarters are in motion. It is by Harry Bates, and was possibly his first essay in the modelling of a horse in the round. The conception of the whole, pedestal and figures thereon, is excellent, although it is, if anything, small in scale for its position.

The equestrian statue of Lord Lansdowne, which stands opposite, has nothing striking about it



[Photo Bourn and Shepherd]

SIR JAMES OUTRAM STATUE, CALCUTTA

One of the great equestrian statues of the world

Begun by Bates and finished after his early death by Onslow Ford, it is a good likeness, but the head being concealed by a hat is a fatal error, and the artistic interest in this is wholly in the allegorical figures on the pedestal.

Between the latter and the Marquis of Ripon statue is the equestrian one by Goscombe John, R A, of Lord Minto—a good portrait, and the plumed hat, with its feathers blowing in the wind, has been well utilised to indicate movement. The poise of the figure is characteristic, but the size of the horse compared with that of its rider is here again too small, and thus the dignity of the whole, so finely achieved in the best of the Foley's, is missed. When first erected the pedestal was enriched by the panels in alto-relievo now around the plinth of Frampton's statue of Queen Victoria at the Victoria Memorial. These were not at all pleasing viewed from a distance, so the sculptor designed another undecorated pedestal, the panels being made use of as stated.

At the junction of the Diagonal and Kidderpore Roads, across the Maidan, is another equestrian statue, that of the murdered Viceroy Lord Mayo, which was unveiled by King Edward VII, when Prince of Wales, in 1875.

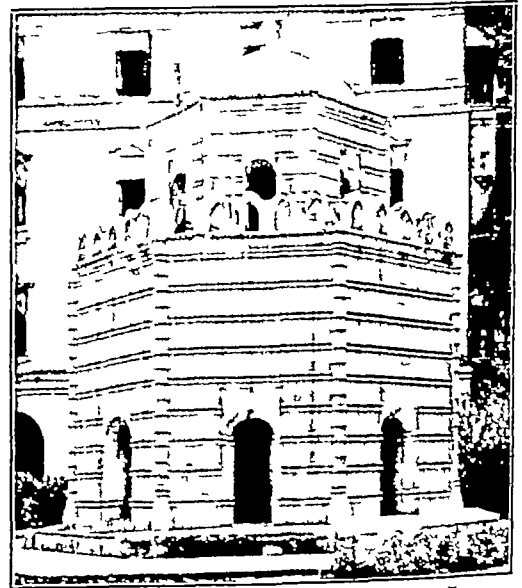
At the corner of the Maidan, facing the stretch of Old Court House Street, is the Cenotaph, erected in memory of citizens of Calcutta who fell in the Great War. Appropriately guarded by

two bronze figures of soldiers in steel helmets and war kit, standing with arms reversed, it is the spot where yearly homage is paid to the illustrious dead by representatives of every section of Calcutta society.

At the south-east corner of Government House grounds, on a triangular plot of grass known as "The Cocked Hat," is another of Foley's equestrian successes of Lord Hardinge, who was Governor General from 1844 to 1848, and who is noted for his conduct of the Sikh War of 1845, when, within three weeks of the invasion of British territory, he had fought the battles of Moodkee, Ferozeshahur, Aliwal, and Sobraon, occupied Lahore, and annexed the Jullundur Doab. The statue is a splendid representation of a splendid soldier.

Immediately opposite to the south gate of Government House, and facing it, is a full-length standing figure by Woolner, of Lord Lawrence, who was the last member of the Indian Civil Service to fill the office of Governor General, and is known to fame as the "Saviour of the Punjab," during the Mutiny. The statue is a fine piece of work and a good likeness.

On the grass plot to the west, balancing the statue of Hardinge, is another equestrian one by Foley of Earl Canning, Governor General from



[Photo Johnston and Hoffmann]

MAUSOLEUM OF JOB CHARNOCK (Founder of Calcutta), in St John's Churchyard

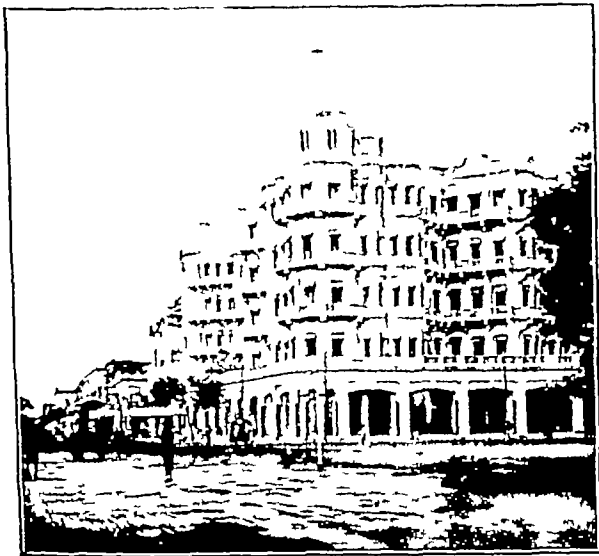
1856 to 1862, the first Viceroy of India. It is the least impressive of the three specimens of Foley's work. Mount-Stuart Grant Duff relates that Canning broke down in his maiden speech in the House of Lords after uttering two or three sentences, hiding his face in his hands, as he said "My Lords, I cannot go on." It will be remembered his Viceroyalty covered the years of the Mutiny, and that his wife lies interred at Barrackpore.

Between the latter statue and the fine figure of Lord William Bentinck in front of the Town Hall is the statue, by Tweed, recently erected to Lord Ronaldshay, Governor of Bengal from 1917 to 1922. Neither in pose nor in likeness is it successful, although it is far preferable to the libel by the same sculptor on Clive in the Victoria Memorial.

The "Bentinck" is a vigorous piece of work, as is also the alto-relievo panel representing a Suttie, which half encircles the pedestal. That subject is chosen because the abolition of the awful custom was decreed during Lord Bentinck's Governor-Generalship, which extended from 1828 to 1835.

A memorial fountain opposite to Old Post Office Street was erected in honour of a member of the Civil Service, William Fraser McDonell, who performed a very valorous action at the relief of the garrison at Arrah, and was awarded the Victoria Cross. He became a judge of the Calcutta High Court, and died at Cheltenham in 1894.

The statues of Lord Northbrook, Viceroy from 1872 to 1876, and of Lord Auckland, Viceroy from 1836 to 1842, standing at the near and farther ends of the road leading from the High Court to the Eden Gardens, are effectively modelled, the former being by Boehm and the latter by Weekes.



[Photo Johnston and Hoffmann]

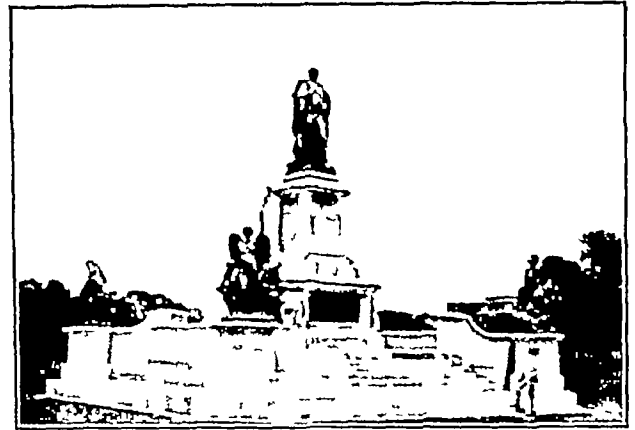
ESPLANADE MANSIONS, CALCUTTA
(Corner of Old Court House Street and Esplanade)

On the south side of the Eden Gardens and the corner of the Strand Road is a white marble statue of Sir William Peel, the naval hero from the *Shannon*, who took part in the relief of Lucknow. It is a hard, vigorous piece of work, by a little-known sculptor, Theed.

Around Dalhousie Square are found statues of the Lieut.-Governors of Bengal. Sir Ashley Eden, 1877 to 1822 (marble, seated) by Boehm,

c

Sir Stuart Bayley, 1887 to 1890 (marble) by Hamo Thornycroft, Sir John Woodburn, 1898 to 1902 (bronze, equestrian), by Frampton, Sir Andrew Fraser, 1903 to 1908 (bronze) by Frampton; and the last work of Onslow Ford, the quaint frog-like marble of the Maharajah of Durbhanga, the leading Zemindar of Bihar, with estates of



[Photo Bourne and Shepherd]

CURZON STATUE, CALCUTTA

2,152 square miles and a yearly rental of 30 lakhs of rupees. This nobleman died at the age of 49 in the year 1898. Represented as on a dais at a durbar, where a Rajah is always high above his Sirdars, his statue, almost on ground level, is most unfortunately placed.

In the northern (the Indian) quarter of the city there are. In the portico of the Senate House a seated marble figure of Prosonno Coomar Tagore, C S I, founder of the Tagore Professorship of Law in the University of Calcutta, in the compound of the Hare School a bronze statue of David Hare, the watchmaker and pioneer of Indian Education, whose tomb is in the garden of College Square opposite.

In the same garden will be found a marble statue of Pundit Iswar Chandra Vidyasagar, principal of the Sanskrit College, and corresponding to it on the other side of the garden, and immediately in front of the quaintly designed Buddhist temple (enshrining one of the Master's teeth) is a marble column erected "In Memory of Members of the 49th Bengalee Regiment who died in the Great War, 1914 to 1918." At the junction of College Street and Harrison Road is a white marble statue, of poor execution, of Rai Kristo Das Pal, Bahadur, C I E, who was a man of the people, and worked his way up to the positions of Secretary of the British Indian Association, Municipal Commissioner and Member of the Bengal Legislative and Viceroy's Councils. He died in 1884, and his statue was unveiled by Lord Elgin in 1894.

At the southern end of Strand Road is the well designed Lascar Memorial, erected by the shipping companies and the mercantile community of Calcutta in memory of 896 seamen of Bengal,

Assam, and Upper India, who lost their lives in the service of the British Empire in the Great War of 1914-1918. This exceedingly fine structure is the work of W I Keir, A R I B A, Consulting Architect to the Government of Bengal. It was designed to stand right up to the edge of

figures in the round, crowned by the imposing figure of the Viceroy, make it one of the most successful works of its sculptor, Hamo Thornycroft, R A

Various Buildings

The Indian Museum in Chowringhee is a great building in the Italian style, by the same architect who designed the High Court. Opened in 1875, its front along Chowringhee measures 300 feet, and its depth down Sudder Street 270 feet. Visitors will find it a storehouse of wonderful interest. Its archaeological, mineralogical, and geological sections, its collection of objects in the mammalian, reptilian, and ornithological galleries provide the students of each of these subjects with abundant material, while to the ordinary visitor the economic and art sections offer many objects of admiration. The displays seem to have the greatest fascination for Indians, and on their numerous holidays the building and its environs are besieged by them in multi-coloured crowds.

In the Indian part of the city the buildings which first attract attention are those occupied by the University of Calcutta, in College Street, the Senate Hall, which is 200 feet in length by 60 feet in breadth, and is flanked by corridors of 20 feet each. Here are numerous paintings and busts of celebrities connected with education.

The enormous congerie of buildings which comprise the Medical College in the same street includes the Central Hospital, the foundation stone of which was laid by the Marquis of Dalhousie in 1848 and opened by him in 1852, the

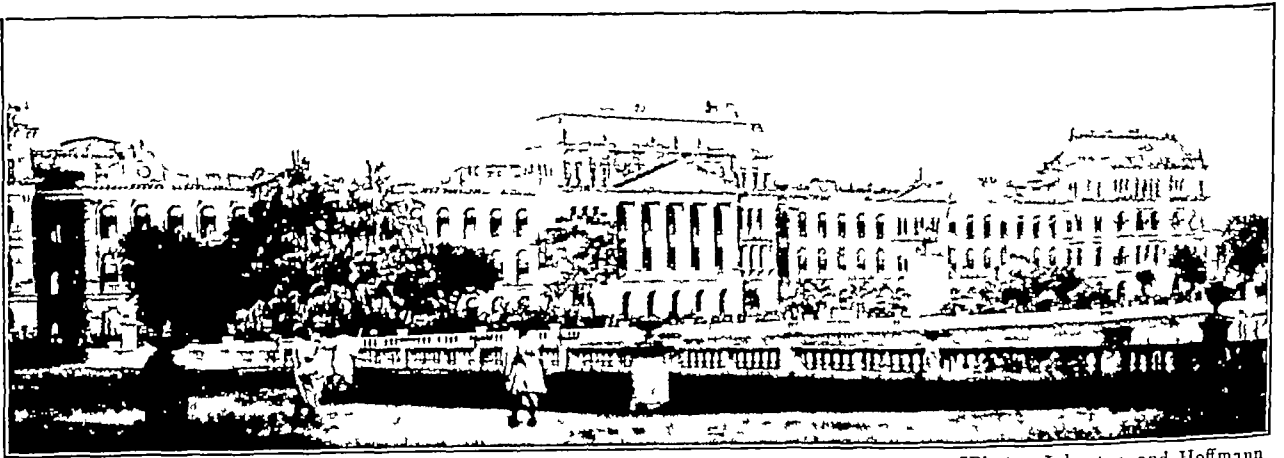


[Photo Johnston and Hoffmann]

CHITPORE ROAD, CALCUTTA

the river and have steps leading from it to the water, but this was not considered advisable, presumably owing to the presence of the Port Commissioners' railway, and accordingly it was placed some hundred yards from the stream, where it is not the great landmark it might have been. Nothing, however, can detract from its excellent proportions and arresting design.

The last great statue to be erected in the city, and probably the last of the statues of Viceroys which will ever be erected in it, as Delhi is now the capital, is that of Lord Curzon, on Queensway, facing the entrance gates to the Victoria



[Photo Johnston and Hoffmann]

WRITERS BUILDINGS, DALHOUSIE SQUARE, CALCUTTA

Memorial, which was his conception. Its fine central figure, with four groups of allegorical figures at the corners of its pedestal, standing on a high plinth in the centre of the road, give it unusual prominence even in the presence of the numerous memorials that have been mentioned. The very feeble bas-reliefs which are supposed to decorate the pedestal are pitifully inadequate, but the whole conception and the fine modelling of the

Eden Hospital (maternity) and an eye hospital, all being wards of the College and administered by its principal. In the Medical College is the finest oil portrait in Calcutta of Dalhousie, and others of eminent doctors connected with the institution.

Close to the Medical College, to the west, is the new School of Tropical Medicine abutting on Central Avenue, and the Carmichael Hospital for

the treatment of tropical diseases. To the east of Upper Circular Road is a Jain Temple, erected in 1867, beloved of tourists, but bearing no affinity to the magnificent temples of Mount Abu or Palatani.

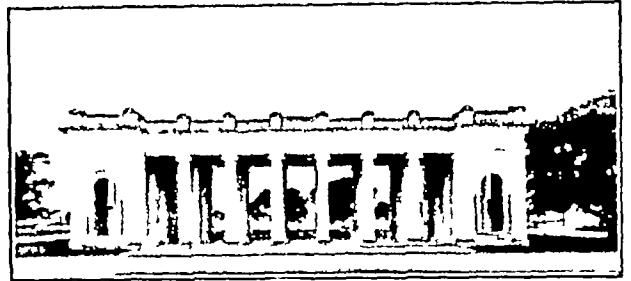
Port of Calcutta.

' Out of the silt and the marshes,
Where the Hooghly winds to the sea,
Built we a port, and a harbour,
Where the liner can rest at her quay,
Grew there a trade that is world-wide—
The produce of mill, mine, and plain,
We bartered for goods from the Westwards,
The East, and the Southern Main,
Long years have we laboured, and prospered,
For how many more who shall say?
Still, we look to the future undaunted
From our port at the head of the bay.'

Calcutta, on the eastern or left bank of the Hooghly River, is situated in latitude $22^{\circ} 33'$ north, and longitude $88^{\circ} 21'$ east, and is far and away the largest city in India. Its growth to this commanding position is owing to the fact that it is the natural outlet to the world's markets for the produce of North-East India and Assam.

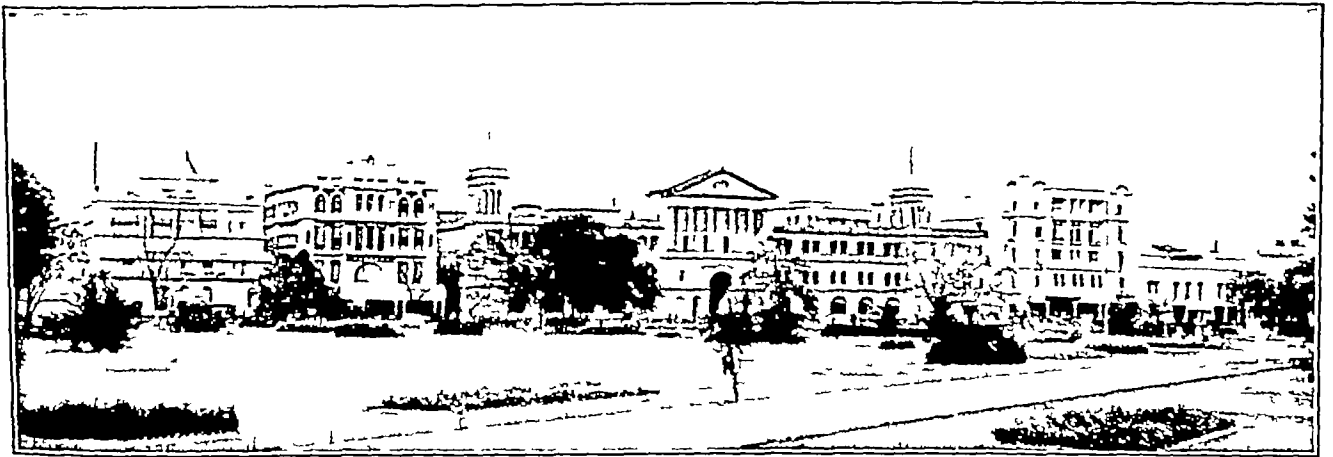
When old Job Charnock chose the site to settle upon, he builded much better than he knew, for then there was, of course, no tea on the Himalayan slopes nor in Assam, nor was the coalfield in Bengal worked commercially, while the great jute industry for which Calcutta is pre-eminent was not thought of. Since his day the port has continuously advanced in importance until now it deals with at least one-third of the whole of

of the Hooghly were few and not too accurate, the Pilot Service was already at work, but without the information which is now given by the River Survey Department, and there were no steam tugs available, so that the navigation of the river was a constant struggle of human skill against the vagaries of Nature. An outward-



[Photo Johnston and Hoffmann]
PRINSEP GHAT, CALCUTTA

bound ship might drop down from Kidderpore to Diamond Harbour in, say, seven days or less during the freshets, but to come up the river was another matter, and for this three weeks was no excessive allowance. Small wonder then that the passengers left the ship at Kedgeree to travel up by horse, palanquin, or row-boat, and Kedgeree, of which nothing is now left except its pathetic cemetery, was then a busy little station, with more than one tavern built to accommodate waiting passengers. For the whole journey from Europe round the Cape at least several months were required. In 1789 the sailing ship *Stuart* left Amsterdam some 14 months before she made Calcutta, and it was not until 40 years later that



ESPLANADE EAST, CALCUTTA

India's commerce, and ranks as one of the greatest in the world.

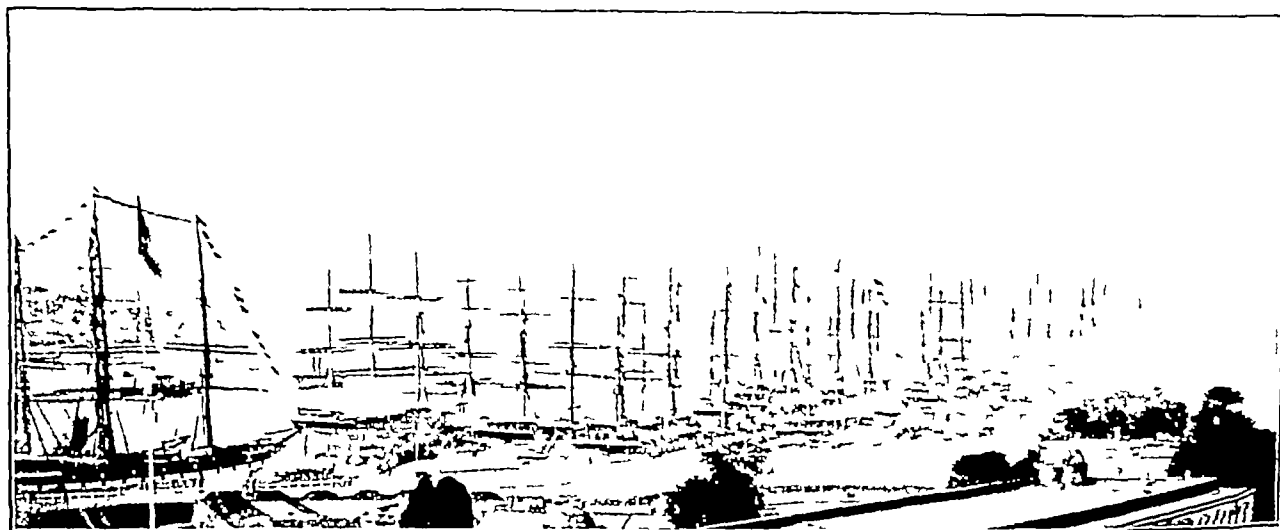
In 1920 the Calcutta Port Trust, in celebration of its Jubilee, issued a very interesting book dealing with its history and development. From that publication have been taken the lines quoted above. Describing the conditions of the port in 1869, when the Trust was founded, and previously, the volume in question says that charts

the *Seringapatam* set up a higher standard by completing the voyage in 79 days. Naturally, to meet the time and risk of these voyages freight charges were high, in 1795 the freight of a ton of wine was more than £30, and insurance stood as high as 12 guineas per cent. But the passing years brought changes and improvements. So early as 1801 it was found possible to build at Tittaghur a vessel of 1,445 tons burden, the

Duchess of Sutherland, the largest vessel built on the Hooghly up till then, and another important improvement was the construction in 1823 of Strand Road, in which connection it is curious to read of the protests of the ship-builders, who had at that time their docks in Clive Street, and not unnaturally regarded this drastic proposal as ruinous to their interests.

At the time the Port Trust was originated, famous East Indian clippers were establishing new records—the *Star of Greece*, for instance, made the voyage round the Cape from England to Calcutta in about 60 days. One can picture such a vessel arriving in all the glory of her full spread of canvas at the outer lightships, she would be met near the Sandheads by one or more of the tugs, and having come to terms with

of the jetty gates, there to be met by one of "Buggy Stuart's" hired traps, which it was incumbent upon every master mariner to use during his stay in port. He would, no doubt, drive first to the office of his agents, one of the old type of buildings, situated in Strand Road, Clive Street, or in the neighbourhood, and would arrange to pay off about half of his crew, keeping the other half in order to work the ship, and thus save as much as possible during the vessel's stay of three or four months in port. He would then, probably, repair to the coffee rooms, which were situated between Vansitart Row and Council House Street, and meet his fellow-captains to exchange experiences. In the meantime, his apprentices would be finding their way to the boarding-house kept by Mrs May in Dharam-



[Photo Johnston and Hoffmann.]

SAILING SHIPS IN THE HOOGLHY RIVER, CALCUTTA, AT THE END OF THE 19th CENTURY.

"By the old Strand Rusta anchorage a long time ago
A sight it was to see them with their decks like drifted snow
Their brasses winking bright
And the gleaming gold and white
Of the carven lungs and maidens on each slim and soaring bow
And the high and slender spars
Humming shanties to the stars
And the hulls of speed and staunchness that are dead men's

[Secrets now—

The ships so brave and beautiful that never more shall be
By the old Strand Rusta anchorage when clippers sailed the sea
Logging fourteen on a bowline and seventeen running free
Racing home to London River
Crack her on for London River
Carry on for London River with her chests of Indian tea

With apologies to C Fox Smith

the Tug Master in strict accordance with the laws of supply and demand at the time, she would commence her voyage up the Hooghly. Drawing perhaps only 20 to 25 feet, she would have little difficulty in making her way safely up the river, even with the less elaborate buoys and marks of the period, and the absence of any dredging of the river bars. Having arrived at the port, she would drop her anchor at one or other of the moorings selected according to her cargo. The mooring for salt, for instance, was somewhere not far south of the site of the floating bridge, coal from England, somewhat lower down, and case oil from America, at Mutiabroz. If she were one of the steamers then arriving in increasing numbers, she would come up without a tug, and be moored at one of the jetties, there to discharge her general import cargo of piece-goods, iron and steel, and oilman's stores. The skipper would leave his vessel, and make his way to the bank

tala, and many of the crew to less reputable resorts around Dharamtala and Bentinck Streets, there to spend their hard-earned money, and when that was done to find a homeward-bound ship.

All this would be in a town very different from modern Calcutta. Prinsep's Ghat was then really on the river bank, and Strand Road ran southward straight towards the Hastings Bridge. The Port Commissioners' jetties and Strand Road presented a very different aspect from their appearance to-day. On the riverside all the sheds were single-storied, the cranes were old fashioned steam cranes, and the railway lines far less conspicuous. On the eastern side of the road many of the present lofty buildings were non-existent, although the Bank of Bengal and the Sailors' Home were already there. Generally, the conduct of maritime affairs, like that of everything else, was leisurely. There was no night nor Sunday

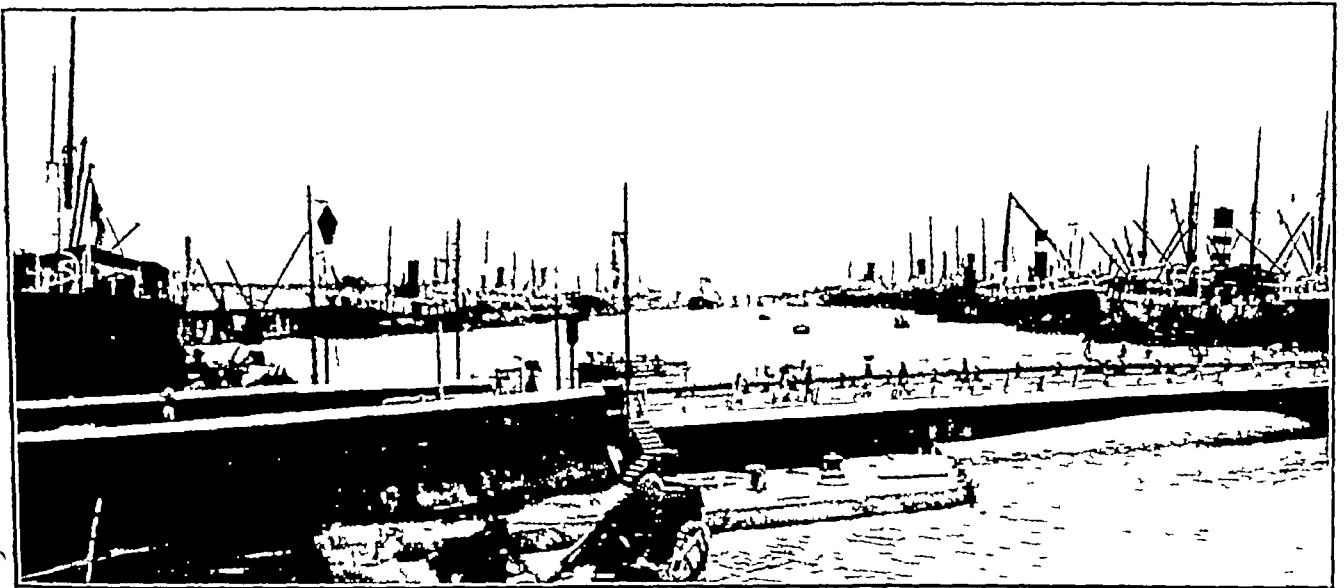
work, and ships were prepared to stop for months, while slowly discharging their inward cargo and accumulating their outward cargo of jute, tea, and other goods, with stone or scrap-iron as ballast.

The extent of the port proper is from Konnagar, nine miles north of Calcutta, to Budge-Budge, sixteen miles to the south of the city, and its administration is committed to a Port Trust composed of a Chairman, Deputy Chairman, and seventeen Commissioners, twelve being elected and five nominated by the local Government. Of those elected, six are the elect of the Bengal Chamber of Commerce, one of the Calcutta Trades Association, one of the Corporation of Calcutta, and four of such body or bodies as the local Government shall from time to time select

sible. At other times vessels of very deep draught are unable to leave the river, and so occasionally get beached, but this occurs very seldom.

The channel from the sea is primarily marked by a line of lightships, three in number, some forty-one miles off the shore and aligned roughly from east to west. They are named "The Mutlah," "The Eastern Channel," and "The Pilot's Ridge."

The two latter exhibit blue lights at half-hour and one-hour intervals respectively, between sunset and sunrise, from March 15th to October 31st, for during that period the reflection of their glare upon the clouds can be discerned by approaching vessels long before the light itself becomes visible, and materially assists them in making an accurate landfall.



KIDDERPORE DOCKS, CALCUTTA

[Photo Johnston and Hoffmann]

as best representing the Indian mercantile community. These Commissioners work under the provisions of the Calcutta Port Act of 1890, and, under a section of the Indian Ports Act, they are Conservators of the Port and have control of the navigable channels of the Hooghly. The progress made in recent years may be gauged by the fact that the income of this body which in 1913-14 was Rs 1,51,28,435 rose in 1926-27 to Rs 3,12,02,183.

The Hooghly River is exceptionally difficult of navigation, and the control of the portion between the port and the mouth of the river is one of the most important of the duties of the Commissioners, who maintain a large staff of experts, river surveyors, etc., for this purpose. Their work is of so successful a nature that, notwithstanding the presence in the river of numerous bars, vessels drawing thirty feet of water can be handled when the ordinary spring tides are running. The period of full and new moons, which occur for comparatively few days in each month, are, of course, those in which this is pos-

sible. An approaching steamer picks up her pilot near the Eastern Channel light, and a line of lightships, the "Intermediate," the "Lower Gasper," the "Upper Gasper," and the "Middleton" (the last two unattended) and buoys, assist him in his work.

The last-named lightship marks the inshore limit of the first bar, which, though not greatly variable, is on occasion the governing bar. It has at present an average depth, below datum, of fifteen to sixteen feet. After this bar is passed the channel runs shorewards, Saugor Island and a lighthouse being on the right or starboard side. It then crosses the Gabtola Bar, at the head of which is another light vessel, and some miles further on crosses another bar, the Balari.

The limit of night navigation is reached at the Hospital Point light, which is roughly eighty miles from the Eastern Channel light.

The next obstruction is the Eastern Gut, a bar which often has the least water over it, the lowest water depth throughout the year averaging seventeen feet. Here the channel runs close

to Hooghly Point, with the Mackrapattu Shoal in the centre of the river. This is the stretch known as the "James and Mary" Reach, which is exceedingly troublesome owing to the strong eddies caused by the entry into the Hooghly of the Damoodar River at a right angle, the consequence being that a double concave is created which makes the five miles below this confluence the most dangerous part of the river for navigation, its evil reputation being world wide.

Passing Fulta, the Royapur Bar, and Moyapur, twenty-three and eighteen miles, respectively, from the city, are far from negligible, and sometimes give considerable trouble by shoaling badly, but higher up there is none of very great importance, and outgoing vessels negotiate them at or near low water, so as to be ready to cross the Moyapur as soon as the tide gives them sufficient depth.

The bars in the river, as distinct from the estuary, are subject to seasonal variation, the most variable one being the Eastern Gut, which has the record of shoaling two feet and a half in twenty-four hours, although there was a dredger at work upon it at the time.

The work of the pilots is, in addition to aid afforded them by lights and buoys, assisted by many leading marks and tidal semaphores, and recently experiments in directional wireless telegraphy have been made to enable bearings to be given to ships in the Bay of Bengal.

The condition of this great waterway is naturally of supreme importance to the Calcutta people, and the undeniable deterioration of the western rivers of the delta is the cause of periodical nervousness as to the duration of the life of the Hooghly. It is, therefore, gratifying to them to have been recently assured, on high authority, that rather than deteriorating in depth, the channel, continually worked at on scientific lines by powerful dredgers, is, if not improving, at least stable, and that the headwaters of the river show no sign of a lessening flow.

Pilotage, in such a river as the Hooghly, is naturally compulsory between Garden Reach and the Sandheads, the charges for this varying with the draught of each vessel, while for the estimate of broken pilotage, the river is divided into twelve sections, and when vessels arrive at Garden Reach they are taken charge of by the Commissioners' Harbour Master.

Time signals are given by three balls placed respectively on the semaphore tower at Fort William, at the Commissioners' office, and the tower at the Kidderpore Docks. These are hoisted at 12.55 p.m., and drop at 1 p.m. Calcutta mean-time, equal to 19 hours 6 minutes 39.2 seconds Greenwich mean-time. A preparation signal is also made by the hoisting of a flag on the semaphore tower 20 minutes before the signal.

The city is served by three great railways. The Eastern Bengal Railway, with its terminus on the east, at Sealdah, brings in the produce of

North and East Bengal and Assam, and runs to the Hooghly at Diamond Harbour. The Bengal Nagpur Railway, with its terminus at Howrah, on the west bank of the Hooghly, connects with the Calcutta docks by a wagon ferry from Shalimar, and runs westward through the Central Provinces to Bombay and southward through Orissa to Madras. The greatest of the three, the East Indian Railway (its terminus also at Howrah), brings the great traffic of the Ganges Valley to the city and connects it with the United Provinces, the Punjab, and Bombay.

In addition to these, the innumerable waterways are crowded with native craft, which, through the Sunderbunds and the Midnapore and Orissa Coast canals, bring to the port the produce of Eastern Bengal and the Brahmaputra Valley, of Orissa and Ganjam, that service being further supplemented by large steamer companies whose vessels ply upon these inland waters and also do extensive trade with the coastal ports.

The port is replete with all modern facilities. The Commissioners' railway, which has upwards of one hundred miles of permanent way, provides communication with various points and connects with all the main railway systems.

The jetties are the oldest part of the port, for four of them were handed over to the Commissioners at the formation of the Trust in 1870. They are now used exclusively for imports, which with the exception of a few bulk and bag cargoes handled at Kidderpore Docks, are unloaded upon them. The disadvantages under which they labour are lack of space for expansion and congestion of traffic caused by unloading in the business quarter of the city. The jetties are nine in number, and have a total length of 4,735 feet, but the ninth, measuring 340 feet, is used for the discharge of lighters and boats, leaving for steamers but eight. Three of the latter have two-storey and the other five single-storey sheds, all equipped with the usual 35-cwt and 5-ton cranes.

The latest addition to the facilities of the port are the Garden Reach jetties completed since the Great War, and consist of a coaling jetty for ships up to the length of 463 feet, and four jetties for ships up to 600 feet, built in accordance with the most modern ideas. The transit sheds have two storeys, the floors of the largest having an area of 127,000 square feet on each storey, and all are equipped with electric cranes, lifts and trolley lines to which every facility of approach by rail or lorry is provided.

The Kidderpore Docks, completed in 1892, consist of No. 1 and No. 2 Docks and a tidal basin from which entry to two graving docks is afforded. No. 1 is 538 feet 9 inches by 69 feet 6 inches, and has 25 feet of water on the sill, No. 2 is 488 feet 6 inches by 69 feet 6 inches with 27 feet of water on the sill. A third and smaller one is reserved for the Commissioners' vessels.

To the docks proper there are two entrances from the river, one of 60 feet and one of 80 feet,

but as the latter entails the use of the whole basin as a lock, and, therefore, can only be used at certain states of the tide, a new 80-feet lock is under construction.

No. 1 Dock is 2,700 feet in length by 600 feet wide, gives 30 feet of water, and provides 12 berths with single-storey cargo sheds and 35-cwt and 5-ton cranes, one general berth being available in the tidal basin.

No. 2 Dock has a length of 1,500 feet by 400 feet, with a similar depth of water and has 5 general produce berths, with double-storey sheds, and 11 coal berths, 2 of the 11 being fitted with Beckett's patent mechanical loading gear, while experiments are in progress in the use of magnets for loading pig-iron.

These docks, when completed, did not attract so many vessels as had been anticipated, but that want of patronage has long passed away and they are the centre of the export trade of Calcutta.

From the docks and the jetties at Garden Reach there was exported in 1926-27 2,176,794 tons of coal, 299,516 tons of pig-iron, 188,576 tons of wheat and seeds, 321,272 tons of manganese ore, 224,662 tons of jute, 69,425 tons of rice, 108,479 tons of tea, 32,153 tons of hides and skins, 29,175 tons of gunnies and 34,348 tons of shellac, the total loaded over the Commissioners' wharves being 3,942,675 tons.

These figures show a diminution in the shipment of coal, which, ten years ago, amounted to about 3 million tons, but manganese ore and pig-iron show larger shipments, the latter increasing to a considerable extent in the last few years.

The Commissioners also provide generous warehouse accommodation in 2 tea warehouses, with a storage area of 304,000 square feet, a hide depot, with an area of 1,000,000 square feet, a grain and seeds depot at Kantapuker, of similar size, which is formed of 31 single-storey sheds, while various others are situated near the Calcutta jetties. A great deal of this accommodation is let out to private firms, who become responsible for the goods and for the handling of them while in the warehouses, but loading or unloading from or to them is done by the Commissioners' contract labour. The remaining sheds are for public use, and the bulree liability in these remains with the Commissioners.

At Budge-Budge, 12 miles down stream, is the great Oil Depôt, where there are 6 pontoon jetties for unloading non-dangerous or bulk petroleum and its products, while another is provided for the dangerous variety. The storage installations (which are company-owned, the Commissioners merely owning the sites served by the Eastern Bengal Railway) have a total capacity of 50,000,000 gallons.

The Oil Depôt has been in use since July, 1886. In 1903 it was seriously damaged by a fire, which began on the evening of March 31st, and raged furiously for several days. The fire completely destroyed the shed wherein it broke out and about

393,000 cases of oil, the loss being estimated at approximately fifteen lakhs of rupees. Since that disaster the lay-out of the depôt has been improved and no other fire has occurred.

During 1926-27 113 vessels brought cargoes to Calcutta and from them 112,276,122 gallons were discharged.

The greater part of the imports of the port, which in 1926-27 amounted to 963,297 tons, is handled at the Calcutta jetties, where all miscellaneous cargo is unloaded. The most important items are cotton piece-goods, galvanised iron sheets, wrought iron, and machinery. Bag cargoes, which for the most part consist of sugar and rice, are discharged at the Kidderpore Docks or Garden Reach jetties. In 1926-27 455,577 tons were handled at the docks, of which 335,796 tons were of sugar and 21,088 tons of rice. This amount of rice is merely nominal compared with the amount handled in years when the Indian crop fails.

A considerable number of ships discharge into privately owned lighters while lying in the stream. Their cargoes consist principally of timber and salt. 436,313 tons of the latter was unloaded in 1926-27.

The Commissioners have a small permanent labour force, but as there is in the city a fairly constant supply of labourers, reliance is placed on contract labour for the greatest proportion of the work required.

The following table gives the aggregate trade of Calcutta both with foreign countries and Indian ports in 1925-26 and 1926-27 —

Foreign Trade	1925-26	1926-27
	Rs Lakhs	Rs Lakhs
Imports	86,54,94	98,32,69
Exports	1,47,22,77	1,28,17,23
Total	2,33,77,71	2,26,49,92
Coasting Trade		
Imports	16,65,52	18,53,50
Exports	15,59,62	15,80,55
Total	32,25,14	34,34,05

The ships which arrived in the port during 1926 numbered 1,274, those which departed 1,281, representing a gross tonnage of 6,972,426 inwards and 6,961,171 outwards, a total gross tonnage of 13,933,597. These were, of British nationality 814, of Japanese 57, of American 56, of Dutch 38, of Italian 29, of German 32, and 19 were of other European countries.

In addition to the dock accommodation already mentioned there is at present under construction King George's Dock to the south of Kidderpore, which will eventually provide an additional 33 berths and be one of the largest docks in the

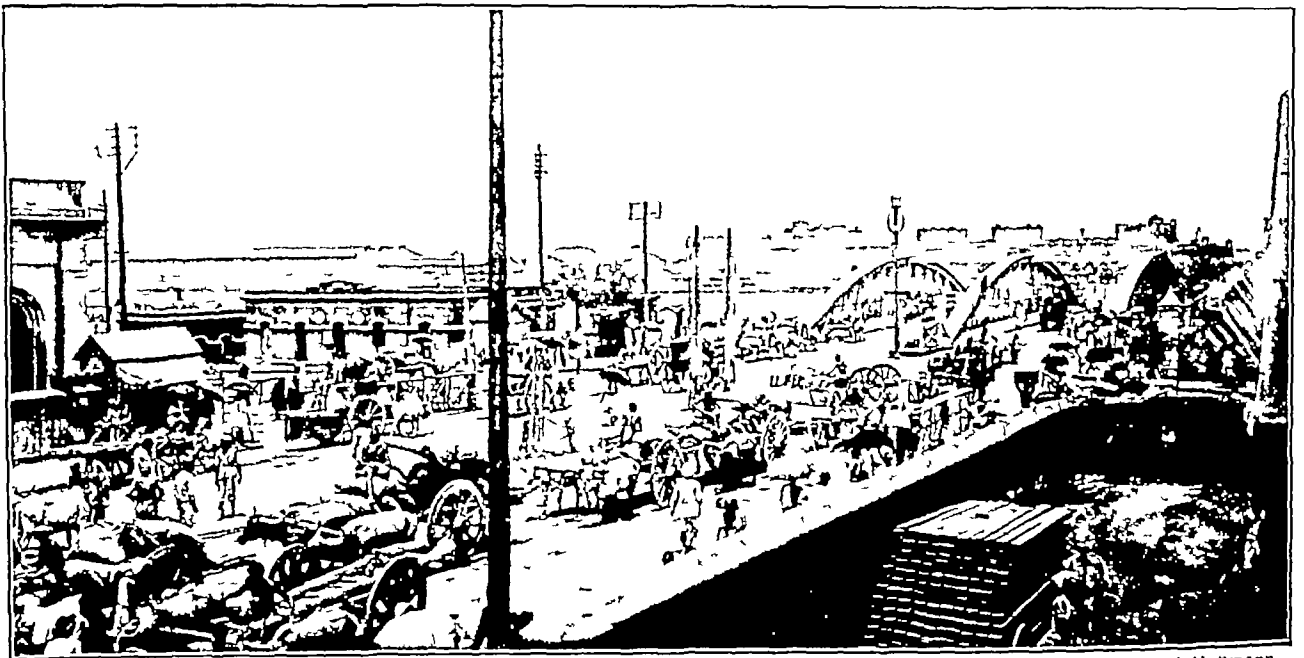
Orient A heavy lift yard and two graving docks are also being made. The part now being constructed includes the lock entrance, two graving docks arranged tandem, and capable of entry either from the river or the dock, three import berths, one export berth and the heavy lift yard. These import berths will have three-storey sheds of the newest type and the export berth a two-storey one. Contractors' delays and difficulties occasioned by the British coal strike of 1926 considerably retarded the work, which, it was hoped, would be completed early in 1928, but it will now probably be finished at the end of that year.

The Commissioners have also in hand the construction of a new 80-foot lock entrance to the Kidderpore Docks, which has been found neces-

bridge its name, a suburb with no other interests than those of its mills and its railway termini.

The bridge is a clumsy looking structure of wood and iron, on pontoons, carrying a roadway of about forty feet in width, flanked by footways six feet wide all wood paved. The bridge is capable of being opened in the centre to allow the passage of vessels. It is now nearing the end of its usefulness, and the question of the erection of a new bridge and the determination of its character, whether cantilever or with piers in the river bed, has been for many years, and is likely to be for many more, the most keenly debated topic in Calcutta.

Inefficient as the bridge is, it has been the way over which the great mass of Calcutta



HOWRAH BRIDGE, CALCUTTA.

[Photo Johnston and Hoffmann]

sary owing to the inadequacy of the present 60-foot entrance for the passage of modern vessels. The new entrance is being constructed between the old one and a small dry dock, a scheme peculiarly difficult because of the fact that the site is entirely surrounded by water or the structures already mentioned. It is, nevertheless, progressing satisfactorily by means of monoliths, the floor wells of which cover the whole width of the floor between the side-wall wells. It is hoped to complete this entrance early in 1929, when it will greatly increase the usefulness of the old dock system.

The estimates for the construction at present authorised by the Commissioners at the King George's Dock amount to 8,30,63 lakhs of rupees.

Calcutta's Only Bridge

Howrah Bridge, the first seen in ascending the Hooghly River and the only one across it within the limits of the city, connects Calcutta with the manufacturing suburb which gives the

trade has passed, and the press of vehicular and pedestrian traffic over it at any hour when it is open would surprise the founder of Calcutta, could he return and see it.

"He'd rub his eyes would honest Job
At reeking chimney, smoke-stack, mast,
And might object that trade should robe
In grime his shanty of the past

But listening to the city's din,
And watching how her thousands trod,
He'd feel each nail he'd hammered in,
Had grown a rivet under God

For Howrah Bridge is something more
Than iron, wood, foundations, piers,
It stands a sign from shore to shore,
Of wonders linking up the years

Of order, law, of teeming trade,
Of blood and tears and stress and toil,
And Freedom springing 'neath the shade
Of Empire on a foreign soil"



CUTTING JUTE



EXTRACTING THE JUTE FIBRE.



WASHING JUTE AND BEATING IT WITH MALLETS



DRYING JUTE ON BAMBOOS



DRUMMING JUTE, LAST ROLL.



WEIGHING JUTE AT PRESS HOUSE



CARTING JUTE TO MARKET.

Photos Johnston and Hoffmann

THE JUTE INDUSTRY.

A little way to the north of the Calcutta end of the bridge stands the Mint, consisting of two buildings, one, the finer of the two, for silver, and the other for copper. Erected on foundations twenty-five feet below the ground level, they took six years to erect and were opened in 1831.

Farther north, but at some considerable distance, is the burning ghat (Nimtollah) where all classes of Hindus burn their dead, a spot to be avoided, or if seeing it be desired, best viewed from the deck of one of the up-going river steamers.

Jute Industry

To those who do not know Bengal there is in a gunny bag nothing to arouse ideas artistic or poetical, no suggestion of the stages of beauty which the fibre has passed through, nor of the strenuous labour of the patient ryot and of the mill hand, which has gone to its production, but to those who do, and have seen the bronze-skinned Indian sowing, planting, and cutting it, memories will arise of the plains where it is grown, the great stretches of almost uninterrupted flatness running to far horizons turned by the rising sun into varied patterns of brilliant colours. They will recall the startling suddenness with which the golden orb comes up, as though eager to run its daily course, and how its rays seem to single out and turn to a flaming glory the ruddy crimson of the growing jute.

Scenes of the cultivators engaged in steeping the harvested fibre in the numerous waterways that intersect the land, the sky and water blazing with sunset glory, across which the sodden jute, the men, and strips of land, make bars or blots of sombre shadow, will recall the long hot days that have been passed since the sowing, while other impressions may be remembered of the country submerged for many miles by floods brought on by days of fierce torrential rain, mud houses soaked till they became a heap of soil, galvanised iron roofs which protected storehouses splayed upon the mud, the ryots sheltering in the trees dotting the highest ground, awaiting rescue which sometimes came and sometimes did not.

The loading of a flat with jute packed in bales provides pictures that also live in the memory—the lithe muscular bodies of various shades, from deep dull purple to the palest bronze, dripping with moisture, and contrasting in colour with the silken texture of the now dry jute, some silvery, some golden, or of a grey which has in it a glint of these or of a deeper brown. This is the raw jute which, pressed in heavy bales, is shipped abroad for manufacture into an ever increasing variety of articles for which its strength and beauty make it suitable, but great quantities are also transferred in bullock carts from flat to mill to be made into the gunny cloth and gunny bags of commerce.

Calcutta is the greatest centre of the jute industry in the world. In the mills which cluster along both banks of the Hooghly for many miles, many thousands of Indians work at machines which make the fibre into yarn, then into cloth and bags, under the superintendence of Europeans, who, despite the comfort of their quarters on the riverside, flock into the city for the week end and add considerably to the number of the patrons of the restaurants and cinemas.

Tea Industry

The growth and manufacture of tea are processes which, when seen and known, make the drinking of a brew from it much more pleasurable. In India it is grown on the slopes of the hills of Assam, Bengal, and Southern India, and the compact little bushes, averaging three feet or so in height, dispersed in regular lines on the lower Himalayas, interspersed with the graceful *Albizia stipulata* trees to provide them with tender shade, contrast delightfully with the giant oaks and conifers which are the natural inhabitants of these hills from 1,000 to 8,000 feet in height.

The smallness of the bushes and their regularity make the term "tea garden" particularly appropriate, for an area so planted and irrigated by rivulets of clear upland water, in front of distant hills running away in subtly-coloured grey tones to the whiteness of the eternal snows shining against a pure blue sky, provide (if the absence of flowers is overlooked) a scene of which there could be no more apt description.

In such exquisite surroundings tea grows and thrives, and those who tend it are men and women of some of the happiest races upon earth, short and sturdy, of light complexion with rosy cheeks, the women delighting in colour in their dress. They are drawn from the people of Nepal, Sikkim, Bhutan, and Assam, with a contingent recruited from the plains of Chota Nagpur and Behar. But wherever they come from, the climate in which they work (a perfect one in summer) makes them go about their toil with happy faces and a mind tuned to mirth.

Given good quarters and medical attendance, they turn out for their weekly holiday at the nearest market town dressed in all the colours of the rainbow and glittering with silver or golden ornaments. There they load themselves up with purchases, and then trudge miles back home, making the great avenues of pines through which they pass ring with their laughter and their song. To other less sturdy people, their work, done with a heavy basket strapped upon their backs, up and down steep declivities of some thousands of feet, would seem exceptionally trying, but they, with muscles that seem to feel no fatigue, go through

a long day on the mills and return at sunset apparently as fresh and jovial as they were in the morning.

When the pluckings are brought to the factory, there starts (under European supervision in most cases) a long series of cleaning and drying processes by ingenious machinery in buildings varying in area with that of the garden. The tea is eventually sorted into various qualities, packed in boxes, and transported on the backs of ponies or of the hill men or women, to the rail or steamer head, whence it reaches Calcutta, where it is blended and shipped throughout the world.

Further information regarding the tea industry will be found in the articles on the tea concerns in the section of this volume entitled "Commercial Calcutta."

roofed huts that shelter the workman and his family or provide accommodation for the pursuit of modest industries. The ornate and the squalid are everywhere cheek by jowl. In Burra Bazaar, the centre of Indian trade, houses of four or five storeys, built on a plinth four or five feet high, rise directly from a road twelve feet wide innocent of pavements for foot passengers. Bullock and buffalo-drawn carts heavily laden compete with office jauns (the Calcutta box gharries), motor-cars, rickshas and pedestrians for the right of way, and when an accident occurs or a cart to unload, gets at right angles to the traffic, pandemonium reigns supreme. Then if a storm occurs and makes the road a quagmire in which the shod and unshod slither on the clayey surface, where at intervals are heaps of refuse, sometimes



[Photo Bourne and Shepherd]

OLD COURT HOUSE STREET, CALCUTTA

Street Scenes and Impressions

The Indian portion of the city covers roughly an area of ten square miles, and, from the air, must, save for its few open spaces, seem a fairly solid block of dwellings of brick, stone, straw and mud, intersected by a few visible streets, for the majority of them are too narrow to be observed from any considerable height. North of Dhurumtollah Street they are massed together in this way as far as the Circular Canal at Chitpore, being intersected by only four roads of fair width from north to south, and by only two from west to east, exclusive of those recently added by the operations of the Improvement Trust, such as Central Avenue, etc. The old roads are of about twenty feet in width, with tramways running in the centre, and pavements varying from non-existence to five feet in width on both sides or on one side of them. In these thoroughfares the houses and shops are constructed in the most erratic fashion, and include mercantile offices, residential buildings or rajahs' palaces towering to close on a hundred feet, next to mud-walled and reed-

only obstructive, but often vilely offensive, there is as unpleasant a locality in which to transact business as can well be imagined.

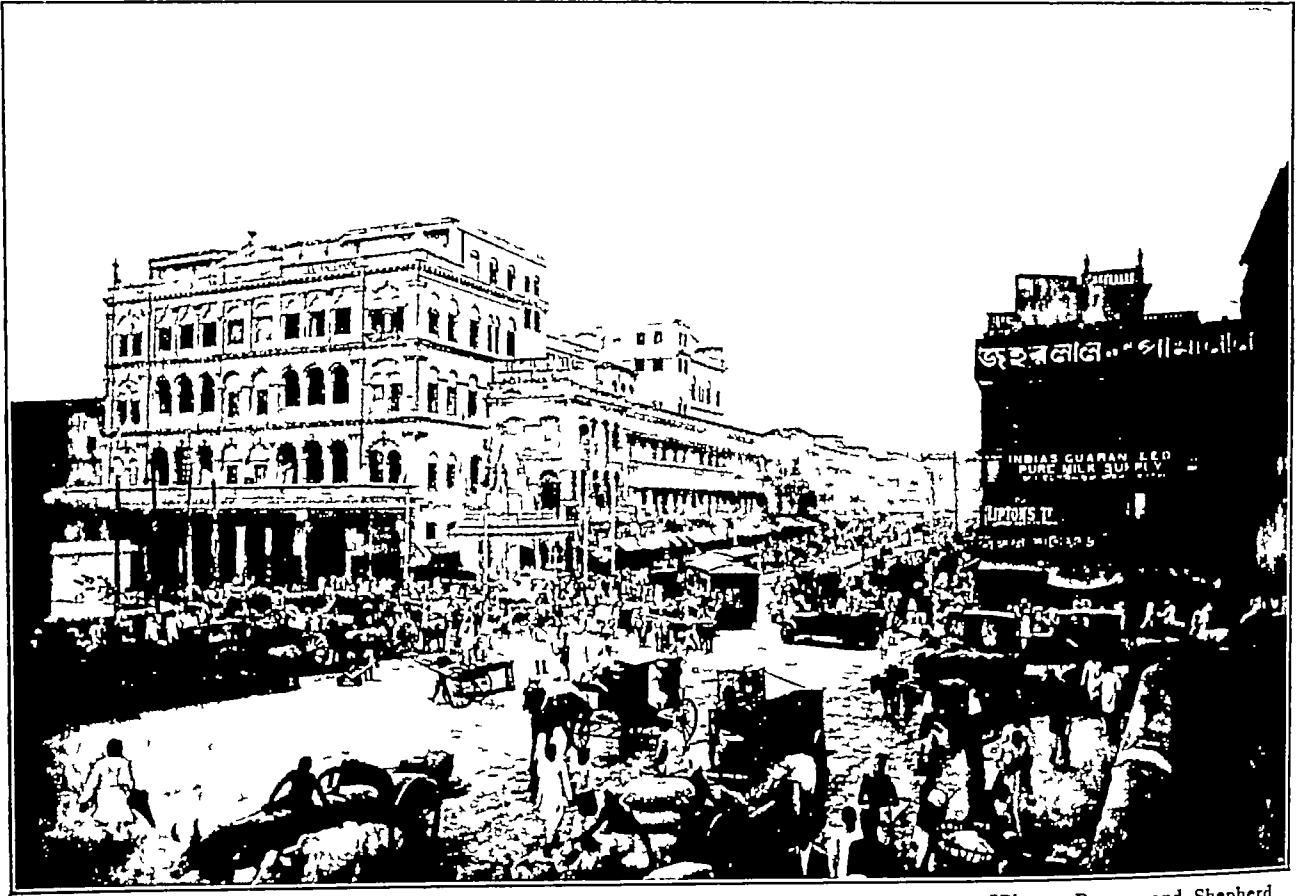
This, however, describes one of the better streets in the quarter. There are hundreds of smaller lanes and alleys, some of but three or four feet wide, which twist and turn (one is called Serpentine Lane) in an incredible manner, and in these the conditions mentioned are intensified to a degree inconceivable to those who have not experienced them. Thronging the whole of this quarter from early morn till dark is a mass of pedestrians. Before dawn a stream of women wend their way to the river to bathe, and before they return the bulk of the people are about—coolies, clad only in a dhoti (loin cloth) with or without headgear, clerks (Baboos) similarly attired, but with an additional shirt, its tails waving in the breeze, and worn without a collar. Persons higher in the social scale will add to or substitute for the shirt a coat, and this rank when reached is nearly always decorated by a fountain pen. Thus apparelled the Bengali goes to office,

crowding the tram-cars—in which he generally contrives to get a glorious spell of often broken sleep

Many Indians at the top of the social ladder motor to their offices in garments indistinguishable from those of their European confrere, while on the footways are black-bearded and ringleted big-boned men from the Punjab, in voluminous pyjamas, with coats and waistcoats of cloth or velvet, splashed with colour and bright with gold or silver braid or buttons, lithe, little men of fairer complexion from Madras, with a small round cap and coat above the dhoti, and

Indians of every shade, from the Anglo to the Indian, red-puggried police, in white, but their sergeants in blue and silver, beggars with horrible sores and complaints visible and voluble, or wanting certain anatomical details, Marwari women in full, gold-rimmed swinging skirts, with coloured camisole, bejewelled at the head and feet, all these jostle each other in the crowded streets, while tram-car gongs and motor horns noisily sound their way through the throng

There is no regulation of foot passengers yet, so collisions are frequent, and as Indians are fond of carrying umbrellas at the slope, they have



HARRISON ROAD, CALCUTTA.

[Photo Bourne and Shepherd

others of the servant class from the same province, nearly black of skin and fonder of colour in their dress Parsis, too, may be seen, still fairer, frock coated, but wearing a hat shaped like an inverted coal scuttle, Greeks, in coloured lungis and a shirt, dirtier than the Indian and slovenly beslippered, Turks, more grubby still, Goorkas from Nepal, mostly in khaki shorts and coats, with a little round black cap, Lepchas and Tibetans bare headed and bare necked, unshod, their coarse grey blanket garment secured with long brass skewers, Ceylonese, all in white, with neatly trained hair in which is fixed a circular comb, Chinese in baggy white cotton shorts and shirts, Marwaris, with pugrees of all colours and patterns, and perhaps roped about as well, Anglo-

to be careful of each others' movements, but not all the turmoil of the streets, nor a furious altercation next to them, serves to disturb the great white Brahmini cattle that seek their food along the shops, in the dustbins and amongst the rubbish heaps, or, of this tiring, lie down and go to sleep anywhere, in the narrowest of lanes or on the broad pavements of Clive or Old Court House Streets

It is, however, upon days of great festivals that the streets best show their varieties of clothing and come nearest to the general conception of "the colourful East" If the festival be Mahomedan men appear in coats, waistcoats, and caps of the most gorgeous colours and materials, which attain an even greater brilliance in the children

of the male sex. If the jubilation be a Hindu one the colours generally occur in the sares of the women and most exquisite groups will be seen among the trees along the border of the great *Mudan*. Primrose and the loveliest of greens, which make the grass and foliage look grey, will clothe the copper or gold-fleshed figures, and be accompanied by one or two in purple or in crimson. Another group will be in sares of the blues and purples, among which will flash one of orange or a scarlet shot with gold, making, as they pass from shade to sunshine or the reverse, pictures of unforgettable beauty.

oil in a small earthen bowl and lighted), which produce the most fairy-like "Will o' the wisp" illuminations possible. Before the advent of electric lighting this method transformed Calcutta at times from a city of dreadful night into one of elflike and evanescent charm.

The European (southern) portion of the city is provided with wider streets, and, until recently, most of its residences had gardens and tennis-courts attached, while the roads are lined with trees on either side, the general aspect (save that the houses are flat-roofed) being that of the outskirts of an English country town. The



[Photo Bourne and Shepherd.]

BURRA BAZAR, CALCUTTA

In the days of the Holi (Hindu) festival the men wear wreaths of brilliantly coloured flowers around their necks, depending to the waist, or stick behind their ears, a great hibiscus bloom, while their faces, hair, and clothing get bespattered with the dry powder which it is the custom for them to throw over each other. This powder is of the most intense scarlet, crimson, saffron, or purple hue, and when, varying in degrees of density, it is liberally scattered upon the whiteness of their clothes, its effect is bizarre in the extreme.

One of the sights of the year is the Dewali, or Feast of Lights, in November. Then every Hindu contrives to decorate his dwelling (and if he is allowed, his European master's) with innumerable *chiraghs* (small wicks immersed in

pedestrians here are comparatively few, except in the morning when clerks and typists are flocking to office, and then in the busiest commercial streets, those of Dalhousie Square, Clive Street, and Old Court House Street, etc., a curious sight is often seen. Intermixed with the stream of people on the pavements, Brahmini cattle, which have been upon the Maidan for their morning meal of its grass, follow each other in Indian file, similar in the pace and apparently in the purpose of their progress with the dapper clerks or short-skirted typists that march with them abreast.

Clive Street in the evening presents on its western, and then shady side another form of obstruction, of which the regulators of its traffic seem equally unconscious. Its pavement is at the most

but six feet wide, and at least three feet of this is occupied by squatting vendors of whatever fruit is in season, which, if of the melon type, is cut into small pieces and sold to the Indian clerks who swarm out upon their journey home. These latter occupy another foot of the way, and on the curb are sicks awaiting their masters, and loafers begging from the crowd, leaving but about a foot of pathway for those who wish to progress, and as progression is allowed in both directions, the speed at which it is possible may be imagined.

Foot passengers, on Chowringhee are seldom obstructed, unless it be when a football match has just concluded, when multitudes of Indians,

to so great an extent that a visitor of 1900 would to-day experience many visual shocks.

A few years after an improvement has been effected it is exceedingly difficult to recollect a locality as it appeared previously, and it is, of course, no one's business to make a photographic record of what is removed, but old residents of Ballygunge remember that the entrance to that suburb from Lower Circular Road was by a road just wide enough for two carriages to pass each other, with, on the west, an open drain which was a continual offence. Now, the road, until it bifurcates to encircle the Ballygunge Maidan, is 150 feet wide, providing space for two



CLIVE STREET, CALCUTTA

[Photo Bourne and Shepherd]

with no idea of the proper side to take, meander everywhere, many gazing at the shop windows as they walk, thus making peregrination among them an exciting as well as an amusing experience. At night the pavements in this portion of the city are deserted at an early hour for, if the European has a craze for walking, he generally does it in the morning, or if he feels he must have a stroll after dinner, it is taken along Queensway, where he finds an open space and any likely breeze.

Modern Improvements

Since the formation of the Calcutta Improvement Trust in 1913, the changes made by it in the city have greatly contributed to the more expeditious movement of the vehicular traffic, have driven wide thoroughfares through crowded and unsavoury quarters, and altered, even in the centre of the city, the aspects familiar for a cen-

footpaths, where formerly there was none, and a roadway, asphalted instead of macadamised, with room for five cars abreast.

A more noteworthy improvement, and one which has afforded much greater facility in proceeding to the great playgrounds of Calcutta society—the two golf courses and the race-course of Tollygunge—is what is known as the Russa Road Improvement. Here there used to be a road from 25 to 30 feet wide, through the Indian suburb of Bhowanipore, which, crowded with vehicular and pedestrian traffic, and having tram-cars running up its centre, was almost closed by these to the passage of motor-cars. To-day it has been widened to 100 or 120 feet for more than a mile, the tramway has been re-aligned, and where practicable a road provided for slow vehicles, with the result of eliminating a crowded and insanitary area, providing easy access to Tollygunge and the

suburb with a street on which fine buildings have been, and are being, erected, combining, as is usual in Calcutta, dwelling quarters above and large shops below. The whole district now appears more prosperous and its inhabitants more healthy because of the greater freedom of movement the work in question has enabled them to enjoy.

In the northern part of the city is the still greater and more beneficial scheme which the Trust has effected by cutting the spacious Central Avenue through the heart of the Chinese and Indian quarters. This provides an alternative

The scheme provides for the extension of this avenue still farther north until it joins the Cossipore Road, the Belgachia Road, which leads to Dum Dum, and the Grand Trunk Road running to Buruckpore, where is a large park with the house in which the Governor spends his week-ends, a golf course, a new race-course, and for a great portion of the year a considerable military community.

From the centre of Chowringhee to the east the Trust has made a remarkable change in the broadening of Park Street, a thoroughfare used by a large portion of traffic from the south-east,



CLIVE STREET, CALCUTTA

[Photo Bourne and Shepherd]

route to the northern outskirts of Chitpur and Cossipore, to the fearfully narrow Chitpur Road, encumbered by tramway traffic, which had become at busy hours almost impossible except at a walking pace. The Central Avenue is 100 feet wide, and already shows signs of what a great artery it will be in the future. Huge structures of four, five, and six storeys, are already flanking it. No tram-cars run there, and the public vehicular traffic is confined to motor-buses, of which, owing to the Trust's provision of wide roads, there are now a great number.

The southern end of this wonderful improvement has removed a congerie of small shops and dwelling-houses from the proximity of the mosque at the corner of Dharamtala and Bentinck Streets, where these connect with Chowringhee, so that from Tollygunge to Beadon Street there is a roadway of the great width mentioned for a distance of some five or six miles.

and now one of the best business streets in the city.

Another portion of the Trust's work has been the "Circular Road to Outer Park Street Scheme," which has cut three broad roads and numerous smaller ones through a particularly unsavoury quarter.

In addition to what has been mentioned, the Trust has, when making these splendid roads, taken every opportunity of opening, between them and the larger of the existing streets, transverse ones to join all together, one or two of them in the Indian quarter being of exceptional advantage. It has also provided blocks of buildings to replace those swept away by its operations, and has not neglected the provision of open spaces, resulting in the formation of Shambazar Park and a large area for what will be a Chitpur-Cossipore Park, while at the other, the southern, end of the city, it is constructing a large lake.

where the Calcutta Rowing Club has erected a club and boat-house and will hold its regattas

This extensive work naturally results in large expenditure, the total of which to the 31st of March, 1926, amounted to Rs 9,10,80,989, including the cost of the Dum Dum Bridge, one of three required to provide for the wider exits to the north

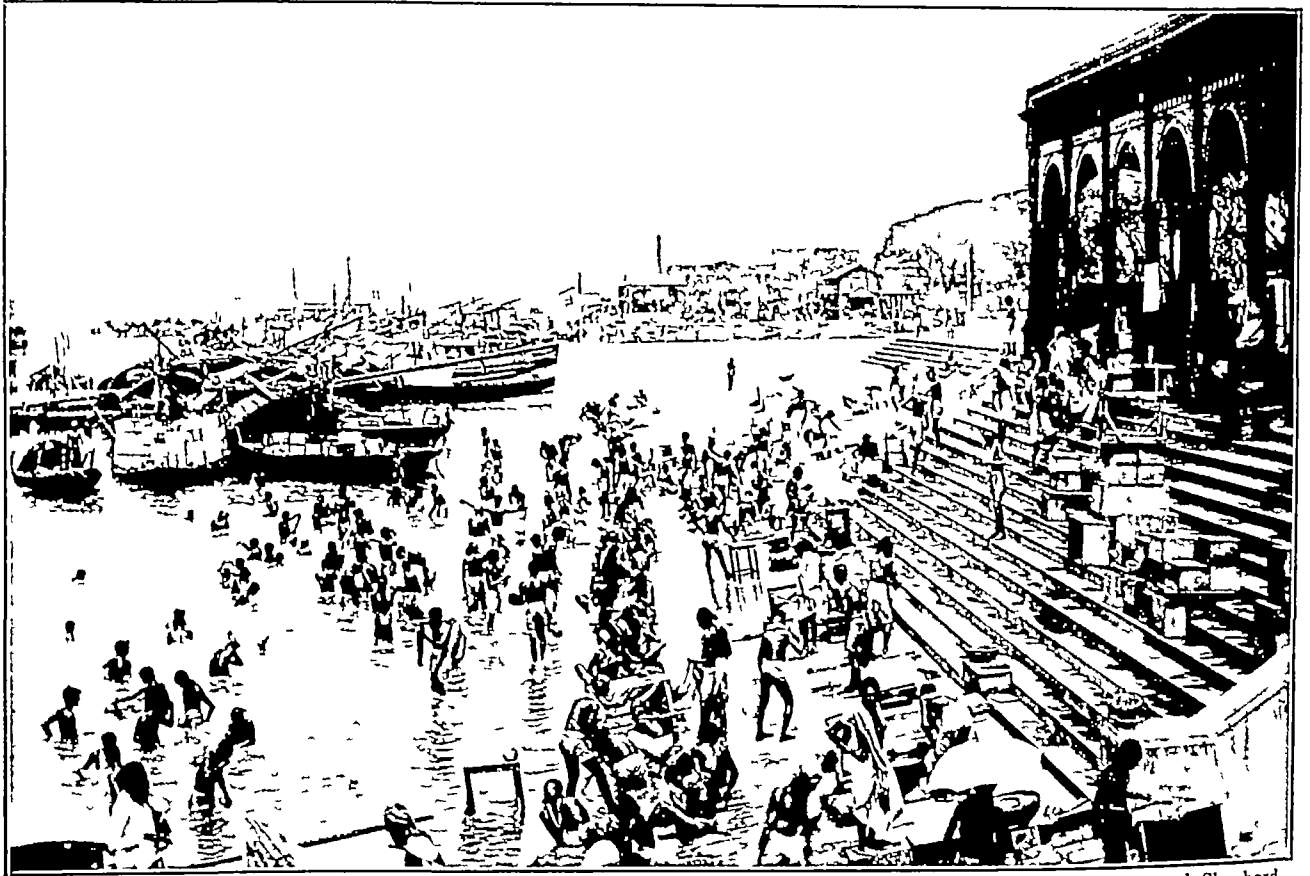
The Trust has, so far, more than justified its formation, and if it functions as energetically for the next quarter of a century, Calcutta should find its traffic problems solved very satisfactorily

The expansion of motor transport and the con-

Climate, Hygiene, and Recreation

Calcutta has three different seasons, the cold weather, as is termed the time between October and March, when the average temperature is about 70 deg, the hot weather, March to the break of the rains, when the average rises to 85 deg, and days may give a record of anything between 100 deg and 110 deg in the shade, and the rainy season, from the middle of June to the end of September, or, in good years, to the end of October, when the average is still about 82 deg

In the cold weather the city is festive. Social entertainments of all descriptions, paperchases, racing, golf, cricket, tennis, picnics, trips up and



[Photo Bourne and Shepherd]

BATHING IN THE HOOGLHY RIVER, CALCUTTA

sequent speeding up of traffic has necessitated the provision of traffic police, a need which has been attended to by the Commissioner of Police in a very noteworthy manner. The parawallah (policeman), profiting by instruction much more quickly than was expected, now has, at many important points, sole control of crowded crossings, and performs his duty to the satisfaction of his own countrymen as well as to that of the European citizens

Horse-drawn vehicles are comparatively few in number, and it cannot be many years before the bullock and buffalo carts disappear from the streets, whereby much time will be saved and traffic control greatly simplified

down the river, theatres, concerts, dances, keep its youth and beauty continually busy from early morn till early next morn. Many brave the early morning mists to have a gallop beyond Ballygunge. The damp fogs of the nights deter them not from theatre, bridge party, or dance, and judging by the bright eyes and smiling lips that grace the tennis lawn or launch, in the freshness of the days, the great social activity is most highly appreciated, and often results in the merry peal of marriage bells

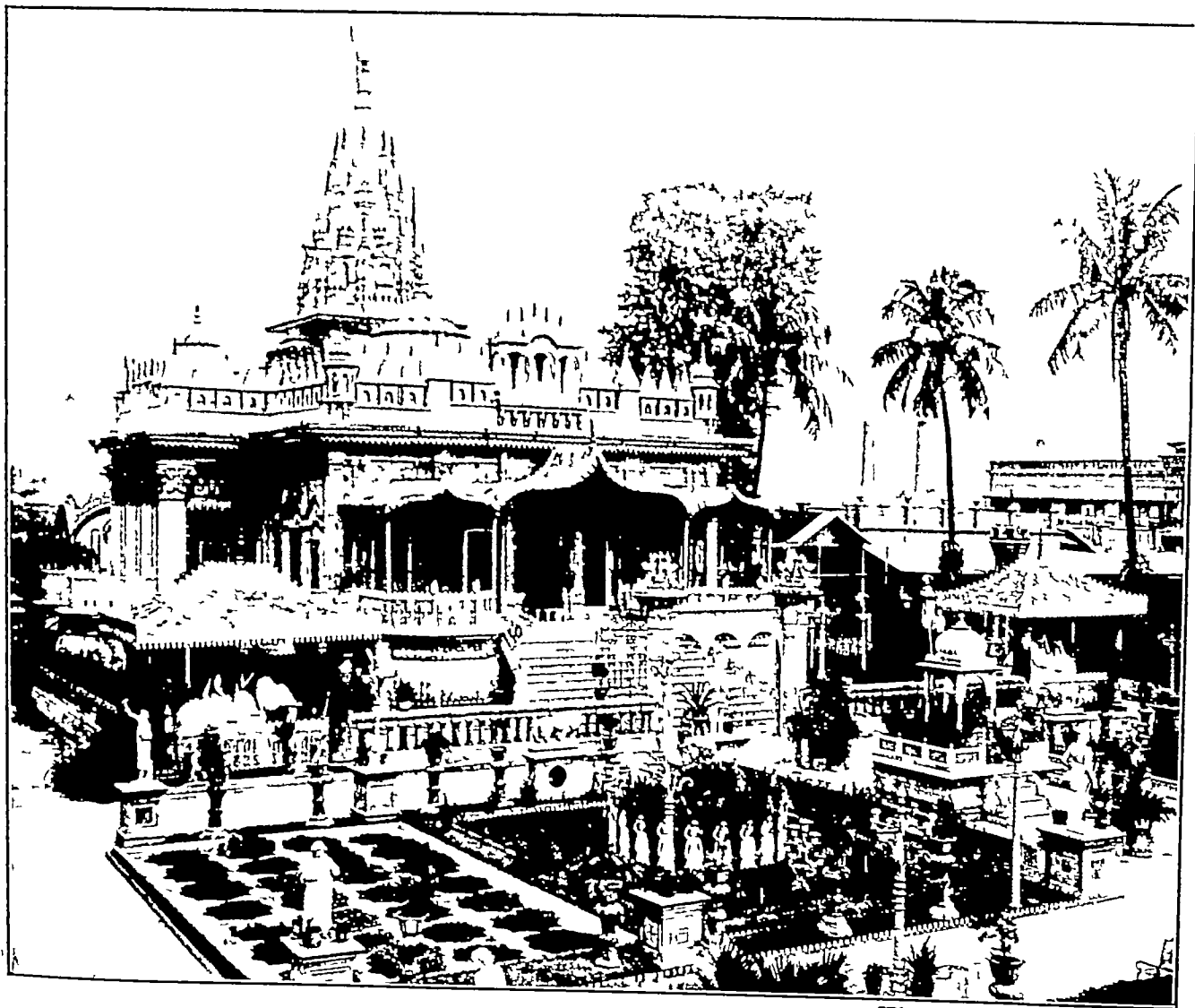
Cloudless blue skies are experienced for most of this period, and in such dependable weather the season's sports are all well patronised, particularly that of racing, which appeals to the

Indian no less than to the European, and on the Viceroy's and King Emperor's Cup days draws to the race-course a crowd of enormous proportions, which the arrival in state of the Viceroy or Governor provides with a spectacle of gorgeous splendour. Society is there in all its "glorious rags"—Maharajahs, Rajahs, and princelings of nearly every State in India, Europeans, official and non-official, ladies of every grade "in the swim" and out of it, throng the enclosure, while

generally leaving with smiles expressing how glad they are to have been useful.

Old Tolly and New Tolly, as the Tollygunge Club and the Royal Calcutta Golf Club are called, claim the presence of a host of followers of the ancient and royal game, morning and evening, and nowhere can more pleasant hours be spent than on their links or the lawns of their respective houses.

Cricket, like racing, appears to have started



JAIN TEMPLE, CALCUTTA.

[Photo Johnston and Hoffmann.]

the centre of the course provides ample standing room for the crowd who cannot afford to pay for admission.

Few race-courses have better provision for the sport than that of Calcutta. The four fine stands, the beautiful paddock, and the course of a mile and three-quarters, most of it in full view of the stands, make it admirable from the spectators' point of view. The provision for the horses and those in attendance on them is no less satisfactory. The ring and totalisators provide the means of obtaining profit as well as pleasure from the afternoon, the bookies, who occupy the former,

D

in Calcutta at the beginning of the 19th century, and the Calcutta Cricket Club ground at the Eden Gardens, enclosed by fine trees, is another much frequented spot in the cold season.

When night falls the restaurants devoted to dancing become crowded, and, after dinner, the one European theatre and the cinemas also claim many patrons, but by two o'clock in the morning the majority of the pleasure seekers have retired, to be up again at five or five-thirty to repeat the joyous round.

Before the Great War all this entertainment was enhanced by levees, dinners, and dances,

large and small, at Government House, but these have almost vanished in consequence of post-war economy, and a garden party or two in the season is the most the greater part of Calcutta society has the pleasure of enjoying in the presence of the Governor and his wife.

At the end of March the hot weather sends those who can afford to go, and those who go at the expense of those who cannot (they call it "at Government expense") to the hills—Darjeeling, Shillong, or Ootacamund. People who must bear the heat proceed to shed all the clothing permissible, and with the aid of electric fans and ice, sit down to grin and bear it.

But those who leave the city then miss seeing it at its best, for shortly after they have departed the beautiful flowering trees lining most of the streets in the southern, or European section, burst into bloom, the bare branches of the lofty cotton trees shoot out their scarlet flowers, and in turn great masses of orange, blue, purple, crimson, lilac and primrose yellow, rise forty to sixty feet high amid all shades of green foliage, while on the earth below the gardens are aglow with their more modest blooms. Calcutta then riots in colour, as though beslagged at being rid of those she counts as the unfaithful. The tennis players enjoy themselves more than ever, for the evenings are long, hockey replaces cricket for the amusement of others, and at sunset the south breeze springs up and makes the later hours the best of all the day. Enjoyable indeed are the evenings and nights until the close of May brings in the higher temperature, and June produces prickly heat.

The latter is the season for cyclones, or if one of these devastating storms does not eventuate, there are sure to be numbers of nor'-westers, sudden tempests of wind and then of heavy rain, with terrific thunder and lightning of varying duration, perhaps accompanied by hail enough to make the ground appear snow covered. If these do not come to alleviate the scorching heat, the "Ditcher" wants to know the reason why and feels himself ill-used, yet still the dancers carry on, if in diminished numbers, while some remember there is a good swimming bath on the Strand Road and wend their way in that direction.

After two months and a half of this, the monsoon may be expected, and as the 15th of June approaches, the eyes of all are directed to the heavens, if by chance its advance may be detected. Newcomers are often deceived and think it has arrived early in the month when the *Chota Bursat* (small rains) herald the advance of its big brother, but old stagers know that after these there will be more heat to make the burdened coolie drip with moisture and the seasoned crow seek any patch of shade, gasping through open beak, before respite of any value comes.

When football has replaced hockey as the popular game somewhere about the latter half of June, the longed for deluge bursts, the ground becomes

first mud, then slush, and then a lake, in which frequently the strenuous game goes on. A bit of red or splash of blue jersey which has escaped the mire enables identification of a player, and so may be known which team is getting through, yet thousands, white and brown, stream across the Maidan with or without mackintosh and umbrella to support their particular team, and watch through pouring rain the players in the quagmire.

The cooler nights and days are sometimes arrested by "a break in the rains," when the land steams in the sun and smells like a newly watered hot-house in the Old Country, but here it is one that cannot be got out of. Such a break has, nevertheless, its compensations, perhaps a glorious sunset, when in the sky a landscape of extravagantly shaped outline borders a glowing sea, sometimes a seeming range of hills, volcanic, deep toned against terrific fires, will mark the dying day, and leave a sense of agitation that will not subside until serenely in the East floats up the orange moon. Then ensues a night such as poets rave of, refreshing breezes cool the moistened skin, cicadas and frogs, if far enough away, give a sense of resting well while others work, the scents of all the flowers are intermingled, and, if there is pleasant company and cooling drinks, life seems liveable—for that night at least.

September and October are again liable to bring cyclonic storms, indeed the worst Bengal has suffered have been in the latter part of the year, one in October, 1864, produced a storm-wave that drowned 48,000 people, did great damage to Calcutta shipping, tore off the cathedral roof and the minarets of the Dhurumtollah mosque. Another in the same month in 1876 caused 100,000 deaths by submerging a great part of Eastern Bengal to the depth of from 10 to 45 feet.

Earthquakes are happily not of frequent occurrence, but that of 1897, which laid Assam in ruins, caused wide-spread havoc in Calcutta. Nearly all the church spires, and many houses, came down, while there was scarcely one that did not show by small or large cracks, the shaking it had undergone, the absence of any loss of life was probably due to the occurrence of the disaster in the late afternoon of a day in June.

The end of the rains brings back the steamy hot-house temperature—the sooner they cease, the worse it is—and then mosquitoes, crickets, grasshoppers, earwigs, and innumerable more detestable insects make life near a light at night a misery, but luckily November is then not far away, and everyone hopes for the early advent of the small green flies which in their thousands come to town, the harbingers of cold weather.

Zoological and Botanical Gardens

The Zoological Gardens are exceedingly popular and beautiful, especially in the late winter and spring, and their collection of animals, birds, and

reptiles is very comprehensive and interesting. No place more pleasant for picnics could be found, if care be taken to keep off the great kites that sail round and strike with amazing rapidity and accuracy upon unprotected catfishes, and a day be chosen when admission is not free.

The Zoo has been a joy to every section of the community since its opening in 1876 by King Edward VII, then Prince of Wales.

The Botanical Gardens, founded by the East India Company in 1786, are about three miles below Calcutta on the Howrah, or western, bank of the Hooghly. Their frontage on the river is a mile long, and their area is no less than 272 acres, intersected by carriage drives and paths, giving access to every portion.

The man who originated the gardens, Col. Kaid, and was its first Superintendent, holding that post for seven years, is commemorated by a most delightfully sculptured white marble urn by Banks.

A great attraction is the immense banyan tree which is world famous, and covers in area 900 feet in circumference. The original stem is dead, and an open space now remains in the centre, but the circumference is still maintained by the aerial shoots from the parent stem, many of the older ones being now in decay.

Very beautiful are the avenues of mahogany, deodar, and bamboo, which border the roads in the gardens, and the great conservatories which house wonderful collections of palms and ferns. In these, when the orchids are in bloom, may be seen a perfect galaxy of flowers of every conceivable shape and colour. The wants of visitors are catered for by the provision of houses where meals may be eaten and drinking water found. These facilities are well taken advantage of by crowds of people travelling by river steamers, which stop at a jetty in the centre of the river front.

The Botanical Gardens are primarily, of course, a commercial undertaking, and have been, and are, a great asset to India in the introduction of new articles of commerce. Their most striking successes have been in connection with the introduction of the tea industry into Assam and of cinchona, yielding quinine, into British Sikkim.

Churches

The churches of Calcutta are not particularly fine examples of ecclesiastical architecture, but the Cathedral Church of St. Paul, to the east of the Victoria Memorial, is perhaps the one of the most graceful proportions. Its foundation stone was laid in 1839, and the consecration of the building took place on October 8th, 1847, the officiating bishop being Bishop Wilson, who gave two lakhs of rupees to the fund for its erection, and is appropriately buried near its altar. The gold communion plate was the gift of Queen Victoria, and the interior has been beautified and enriched in the succeeding years by many gifts in memory of the dead. Prominent among these

gifts are the west window, designed by Burne Jones, which is a memorial to the assassinated Lord Mayo, the tablet to the memory of the Bengal Engineers who fell in the Indian Mutiny, the Gothic memorial to the assassinated Justice J. P. Paxton, the marble one to Ritchie, the friend of W. M. Thackeray, who wrote its inscription, those to Lord Elgin, Sherwood Taylor, and Macnaghten. Two memorials which cannot be passed unheeded are the monument to Lady Canning, who lies buried in the park at Barrackpore, and the white marble statue of Bishop Heber, who is represented at prayer in full canonicals, under the tower. Bishop Heber was buried at Trichinopoly. Another statue of him by the same sculptor, Sir Francis Chantrey, stands in St. George's Cathedral, Madras, and yet another in the south aisle of St. Paul's Cathedral, London.

The older church, St. John's, in the centre of the city, is commonly known to Indians as the "Patthir Girja," or "Stone Church," and to the older European inhabitants as "The old Cathedral." It is much more interesting, from an historical point of view, than the more modern one already mentioned, for the churchyard contains the tombs of the founder of Calcutta, Job Charnock, of Hamilton, the surgeon who went to Delhi in 1714, and by his skill made easier the path of those who followed him, of Watson, the admiral who relieved Calcutta in 1757, of Bishop Turner, fourth Bishop of Calcutta, and others connected with the early years of the settlement, for this was until 1767 its only burying place.

The interior of St. John's is also crowded with memorials, many of them by sculptors of eminence, as, for instance, that of Alexander Colvin, by Westmacott, of Lt.-Col. J. A. Kirkpatrick, by Bacon, of Major Cruttenden and Cheese, the latter a garrison surgeon, both by Westmacott. Erected by the late Lord Minto, during his Viceroyalty in 1905, is a marble bust by Jennings, of the Lord Minto who was Governor-General of Fort William in 1807-13, while a large number of tablets of all sizes commemorate those who contributed to the founding of the city.

The altar rails enclose the body of Bishop Middleton. The picture of the Lord's Supper, by Zoffany, is one of the prized possessions of the Vestry, and the registers, complete from 1713 onwards, are the source from which Calcutta historians have culled their most authentic facts.

St. John's Church dates from April 8th, 1784, when the foundation stone was laid by the Senior Member of Council, Wheler, and it was consecrated in the presence of Lord Cornwallis on Sunday, June 24th, 1787.

St. Andrew's Kirk, or "Lat Sahib ka Girja," "The Lord Sahib's Church," owing probably to the interest taken in its construction by the Countess of Loudon and Moira, wife of Lord Moira (Marquis of Hastings) the Governor-General at the time of its erection stands, as indicated else-

where, on the site of the old Court House, and faces south from the north end of the street of that name. The foundation stone was laid on St Andrew's Day, November 30th, 1815, and the church was opened for public worship on March 8th, 1818. The spire is surmounted by a cock said to have been chosen for that position because Bishop Middleton, the first Church of England Bishop of Calcutta, asserted spires were the monopoly of that body, which roused Dr Bryce, the



[Photo Johnston and Hoffmann]
ST PAUL'S CATHEDRAL, CALCUTTA,
consecrated 1847

head of the Scottish church, to assert he would have a spire and on it a cock to crow over the bishop. Thus he did, and, as Macaulay says, "There it stands unto this day to witness if I lie."

In the vestry of St Andrew's is a portrait in oils of the pugnacious ecclesiastic, which, painted by Sir John Watson Gordon, was sent to Calcutta in the *Protector*. That vessel was lost in a gale in October, 1838, off the Sandheads, and only five of the crew were saved. The case containing Dr Bryce's picture was one of the few packages salvaged from the wreck. The portrait is one of the finest life-size portraits in Calcutta, and is companioned by one of Dr Charles, the succeeding senior chaplain of St Andrew's.

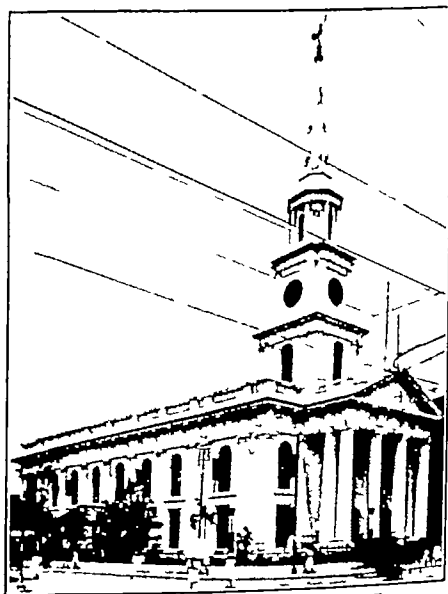
Close by, in Mission Row, is the Old Mission Church, the second oldest place of Christian worship in the city. It was erected in 1770 by the Dutch minister, Kiernander, at a cost of Rs 68,000, of which Rs 65,000 was given by Kiernander. Its architect was a Dane, Boutant de Mevell, who died before its completion. The church was at first a very poor structure in comparison with what it is to-day, and being originally an unplastered brick edifice, it became known as the Lal (or Red) Girja, a name it still goes by among Indians, though its colour has for nearly a century been that of light stone.

Kiernander became blind from cataract in 1778, and although he recovered his sight three years later, his son, in the meantime, seems to have involved him in monetary difficulties and his property was seized for debt, so that he was compelled to go to Chinsurah on Rs 50 per mensem

In this crisis Charles Grant, of Malda, afterwards a director of the East India Company, paid Rs 10,000 for the church, and transferred it to three trustees, one of whom was the garrison chaplain, Brown, who kept it going for twenty years without pay, and vastly improved the building. During this period, in 1804, on the anniversary (23rd September) of the battle of Assaye, Brown preached in the church to a congregation which included the Marquis Wellesley and Major General Arthur Wellesley, afterwards Duke of Wellington. Kiernander, who lived to the age of 88, lies buried in the Mission Church burying ground, between his first and second wives.

The church and all its property was conveyed to the Church Missionary Society in 1870 on condition that that Society should thenceforth supply it with suitable chaplains. It is not generally known that in the mission hall at its rear is a collection of small oil portraits of those who have been connected with the church as pastors.

The most imposing Roman Catholic church in Calcutta is the cathedral in Canning Street. It is the successor of a chapel of mat and straw erected, soon after Job Charnock's arrival in 1690, by some friars of the Order of St Augustin, who accompanied Portuguese settlers. The original structure was followed in 1700 by a brick chapel, which, enlarged in 1720, was damaged in the sack



[Photo Johnston and Hoffmann]
ST ANDREW'S CHURCH, CALCUTTA

of the city in 1756, but escaped total destruction and was seized for the use of the English on the relief of Calcutta. It was restored in 1760 to the Portuguese, who, in 1796, laid the foundation stone of a new church that was consecrated on November 27th, 1799. Inside it lie buried no fewer than seven Vicars-General of Bengal, and beneath the altar is also interred the first Archbishop of Calcutta, Paul Goethals, whose library bequeathed to the See, is a perfect storehouse of information on Indian subjects, many volumes

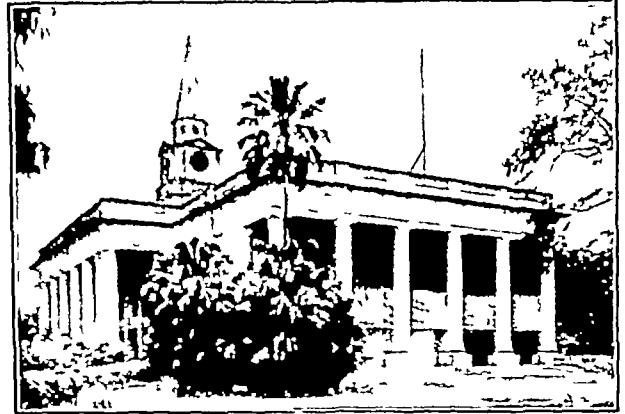
being there available which are unobtainable elsewhere in the city.

The great school of the Jesuit Fathers, St Xavier's, in Park Street, has no outstanding architectural features, but is of historical interest, for its handsome portico and fine flight of steps are the same to-day as when they formed the entrance to the Sims Sower Theatre, which was opened in 1841, and in which, in 1843, Mrs. Esther Leich, "Queen of the Indian Stage," for whose company it had been built, met her death, her dress catching fire from an oil lamp as she stood at the wings awaiting her cue. She ran, blazing, upon the stage, calling for help, and although promptly rolled on the floor and the flames extinguished, she was so badly burnt that, after one or two hopeful rallies, she died sixteen days later in her house next door, now the Archbishop's Palace. The theatre became the property of Archbishop Carey in 1844, and was converted into the great educational centre which it is to-day. Very few who ascend its steps are aware that the little feet of Mrs. Leich, the delight of Calcutta, constantly tripped up and down them.

St Thomas' Church, Middleton Row, although outwardly uninteresting, has an imposing interior and is the church which provides for Roman

been completed, suddenly collapsed, but the spire remained intact. So great was the catastrophe that the walls had to be taken down and the foundations piled and relaid. This doubled the cost of the building, but it was eventually completed in 1848, and is perhaps architecturally one of the most satisfying churches in the city. Its design appears to have been the work of Capt. Henry Goodwyn, of the Royal Engineers.

The other is the Armenian Church of St



[Photo Johnston and Hoffmann]
ST JOHN'S CHURCH, CALCUTTA
(The Old Cathedral), consecrated in 1787

Nazareth, in Armenian Street, a very congested part of the city, to the north of Canning Street. It is the oldest place of Christian worship in Calcutta, dating from 1724. The architect, one Leon Gavona, an Armenian, was brought from Persia for the purpose, and the building has endured for two centuries a witness to his skill. Surrounded by high structures and walls, it now seems singularly out of place, and the narrow streets by which alone approach to it is possible, contribute to that feeling, but the graves in the churchyard make the site sacred to the living, and render it difficult to imagine the time when it will be abolished. The church shares with St John's the distinction of having a large painting of The Lord's Supper as an altar piece, surrounded by a massive frame in the form of a golden Armenian cross, which also frames paintings above of The Father, and below of The Enshrouding of Our Lord, with sorrowing angels and cherubims in the lunettes and circles of the frame. A brass on the left of the altar states that the painting was designed and executed by the English artist, A. E. Harris, in 1901, and presented to the church in memory of Carapiet and Hosannah Balthazar by eight of their children.

Clubs

The oldest club in the city is the Bengal Club founded at a meeting held in the Town Hall on February 1st, 1827, the original members having among their number Lord Combermere, Sir Charles Metcalfe, and H. T. Prinsep. Membership was restricted to "The King's and Company's servants of a certain standing, and the



[Photo Johnston and Hoffmann]
HIGH COURT, CALCUTTA

Catholic worshippers in the southern portion of the city. Its pulpit is generally occupied by the best of its preachers, and its choir is noted for its excellence.

There are numerous other churches belonging to the Anglican, Roman, Nonconformist, Jewish, and Greek communities, but only two others call for special mention. One of these, the Free Church, is in Wellesley Square, and when first built, and when all but the internal finishing had

Bench and Bai of the Presidency," the entrance fee being Rs 250, with the annual subscription of Rs 100 if members were resident in, or within one hundred miles of, Calcutta, and Rs 25 if beyond that limit.

The Club was an immediate success and obtained its first premises in a block called "Gordon's Buildings," on Esplanade East. A frontage on Esplanade could not be obtained, but a ground floor and first floor of generous dimen-



[Photo Johnston and Hoffmann]
PERFORMING ANIMALS

sions at the back of the portion then occupied by the Military Department were secured and opened as the club house at a banquet on July 13th, 1827, when upwards of a hundred members were present, including Lord Combermere, the Chief Justice, Sir C. E. Grey, and two other judges, Sir John Franks and Sir Edward Ryan.

The first president of the Club was Lieut-Colonel J. Finch, Military Secretary to Lord Combermere, but his tenure of the post was a short one, for he was succeeded a month later by Sir Charles Metcalfe.

The Club was considered fortunate in securing the services of Messrs Mackintosh and Co. as its first Treasurers, and at the first annual meeting the balance sheet presented showed a balance in the club's favour of not less than Rs 32,254 14 11, the members on March 1st, 1828, numbering 210.

In 1829 the credit balance had increased to Rs 42,615 13 10, and the Club was removed to the house which was afterwards numbered 4, Dalhousie Square, where it was located for the following sixteen years.

The year 1830 was disastrous to the commercial firms in Calcutta, and the Club, by the failure of Messrs Mackintosh and Co. for the sum of 260 lakhs of rupees, lost the whole of its accumulated funds. That calamity, however, does not appear to have shaken it much, for in the same year the members subscribed for the painting of a portrait of Lord Combermere to be placed in their rooms.

In 1838 a reciprocal arrangement was made with the Byculla Club of Bombay by which members of each of the two Clubs became honorary members of both.

The Bengal Club started in 1831 the famous Ice House which stood until 1882 opposite to the Metcalfe Hall in Hare Street, and was of great service to the amenities of life in the hot season.

In 1840 the Club supported the annual races by presenting for competition a "Bengal Club Cup."

In 1845 it moved to the house formerly occupied by Thomas Babington Macaulay at No. 33, Chowringhee, and by renting adjacent houses in Park Street and Russell Street as its membership increased, found that accommodation sufficient until 1906, when the old buildings were demolished and the Club's present structure was erected on the same site. The front elevation, however, suffers from too great elaboration, and the two lions, which were intended to dignify the central dome, are only successful in provoking mirth.

The next oldest club is the Bengal United Service, on the south side of the Indian Museum, in Chowringhee. It was started in 1845 as "The Bengal Military Club," but changed its title in 1853, its membership being unlimited but restricted to Commissioned Officers or Chaplains of His Majesty's Military or Naval services, members of the Civil Service, and Barrister Judges with permanent appointments from the Home Government. Membership is by ballot, with the exception of the Governor General, the Commander-in-Chief, and other Members of the Executive Council of the Government of India and the Chief Justice of the Calcutta High Court, who may be elected without ballot.



[Photo Johnston and Hoffmann]
PERFORMING ANIMALS

The Club, now operated as a limited liability company, occupies a three-storey building erected in 1905 upon the site of its original premises, and has accommodation for fifty resident members, a fine billiard room on the ground floor, and above it the largest and most comfortable reading room in Calcutta. The library on the ground floor is extensive, but its rooms are already insufficient, and it overflows on to the floor above. The building is of much more satisfactory design than that occupied by the Bengal Club, but suffers some eclipse from the fact that it is placed at an angle

with Chowringhee, the object of this being that the south breeze should penetrate as much as possible to all quarters of the structure.

The compound round it affords space for a lawn large enough to accommodate 500 guests at a Garden Party, and, to the east, an annexe where members can entertain ladies or give private luncheons or dinners. Here have appeared during their career, all the great soldiers and administrators which India has seen since the club's formation, and the institution is the centre around which rotates the social life of official Bengal.

The next in importance is the Royal Calcutta Turf Club, famous throughout the world by the magnitude of the prizes in its sweepstakes, but owing to its special character as a sporting club, its social activities are small. In the matter of racing it is, of course, of the first importance in India, and the magnificent provision made for the sport and its votaries upon the Maidan, at Tollygunge, and at Barrackpore, are worthy of the highest commendation. The Club has always been a pattern in its supervision of racing, the conduct of its affairs, in charge of stewards recruited from the best strata of the city's society, being above suspicion.

Quartered for many years in Theatre Road, the Royal Calcutta Turf Club has during recent years acquired a fine property in Russell Street, where it has erected a club-house, secretary's quarters, stables, etc., giving generous accommodation on the site of the former residence of the late Sir A. A. Apcar, one of their staunchest members till the day of his death.



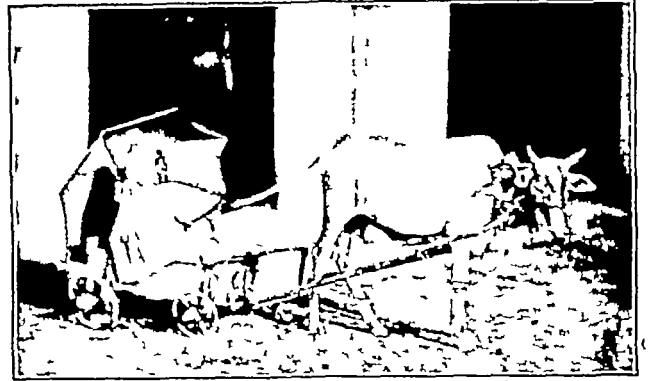
[Photo Bourne and Shepherd]

Watering a Bullock overcome by the heat in Clive Street, Calcutta, in the hot season.

The New Club, situated half way between the Bengal Club and the Army and Navy Stores, Chowringhee, has a membership mainly composed of junior mercantile assistants, a half-way house, as it were, to the Bengal Club, which is that of the head mercantile men or "Burra Sahibs." It was first domiciled in Park Street, opposite to St. Xavier's College, but removed from there some fifteen years ago to its present habitation, where it has fine public rooms and residential quarters for about twenty-five members. No secretary is

employed, the duties usually performed by such an official being carried out by one of its members. Like the other Calcutta clubs, the New Club possesses an extensive library, this being a feature which reconciles ladies to their husbands' and brothers' membership.

At the junction of Lower Circular Road and Chowringhee, and on the south-west corner, stands the Calcutta Club, familiarly known as the Bi-colour Club, the "Byculla" being the club



[Photo Johnston and Hoffmann]

BEGGAR WOMAN AND HER MEANS OF TRANSPORT

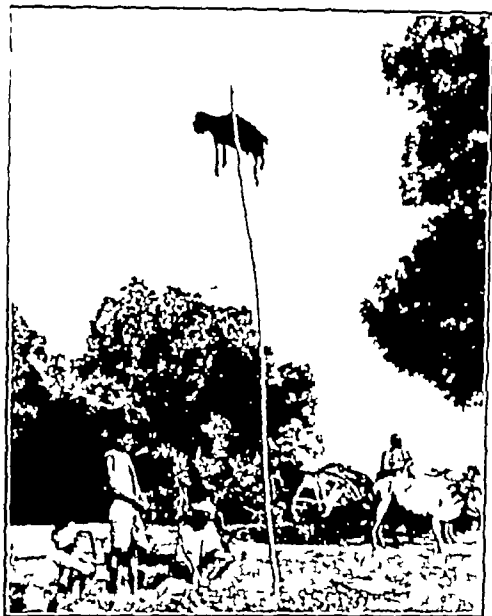
in Bombay. It was started some eighteen years ago with Sir Charles Allen and Mr. (now Sir) Darcy Lindsay as sponsors, as a club to further social intercourse between Indians and Europeans, which it does by admitting both to membership, by choosing its President from either, and by dispensing hospitality to prominent persons of both communities when they visit Calcutta, to which functions members invite their friends. It started with a great flourish of trumpets, but at present its activities are not noticeable. The Indian element predominates in its affairs, and, except when it entertains a Viceroy at a Garden Party or a Governor to dinner, little is heard of it. It is a comfortable club, with a fine dining-room, good billiard-room, excellent verandahs to the south, and an annexe for ladies in the grounds to the south-west of the main block. Of all the clubs in the city it has the most advantageous position in the matters of fresh air and pleasant outlook. Its membership is not large, its residential quarters are small, and its secretarial work is also conducted by a member or members.

In addition to the foregoing there are also in Calcutta a number of small clubs with membership restricted to the trades, or to certain professions, but living accommodation for members is only provided by one of them, viz., "Delta," in Kyd Street. The following are the others:

Dalhousie Institute, trades, Light Horse Club, C. L. H., British Indian Officers' Club, B. I. Officers, and Armenian Club, Armenians.

Amateur photography is represented by the Photographic Society of India, and art by the Society of Oriental Art and the Calcutta Art Society. Sports and games of all kinds have a

number of clubs to cater for their players. Of these, the two great golf clubs at Lollygunge, with commodious houses and wonderful courses, lawns, etc., are the leading representatives, the elder, the Calcutta Golf Club, dating from 1829 and having a club-house and course on the Cal-



[Photo Bourne and Shepherd]
Propitiation of a goat to the goddess Kali in time of cholera, outskirts of Calcutta.

cutta Maidan. Upon that expanse there is also a Ladies' Golf Club founded in 1891.

A younger golf club is the "Jodhpur," which promises to rival its elders in the beauty of its course, if not in the number of its members, before many years have passed. All the golf clubs are thronged on Sundays as well as on all other holidays with enthusiasts of every age, but all are Europeans. The Indian has not yet taken to golf as he has to football, unless, indeed, it be the caddies, who play, with clubs of their own improvisation, quite a respectable game, but the Indian who could afford the regulation outfit is of too lethargic a disposition to walk a course, and prefers to "eat the air" in his motor-car or launch.

The last word recalls that there is a very virile Rowing Club, which sends teams to Madras and Rangoon to compete in the regattas held by the corresponding clubs at these ports and reciprocates, to teams from them, the generous hospitality there received. The new lake to the south of the city, already mentioned, promises to still further enhance the opportunities for boating, and will probably mean a large increase in the number of Calcutta oarsmen. It is generally a surprise to newcomers to find that the Rowing Club has been in existence since 1858, the year following the Indian Mutiny.

Government, Area, and Population

The province of Bengal, of which Calcutta is the capital has been, since 1912, like the provinces

of Bombay and Madras, a Governorship, and is administered by a Governor-in-Council, which means that the governing body is an Executive Council.

The Governor is selected from the ranks of English public men, and is appointed for a term of five years. The same period limits the service of the members of his council, of which the number is restricted to four, two being members of the Indian Civil Service and two private Indian gentlemen.

The province has also a Legislative Council of 51 members, partly official and partly elected and nominated, which elects its own President and Vice-President. In this body the non-official members are in a permanent majority. Power to overrule the Councils is reserved to the Governor, in matters of grave importance, but in all others the opinion of the majority is all powerful.

The province of the Legislative Council is the enactment of laws of application to Bengal and the discussion of its finances and its administration.

The Secretariat (the staff of Secretaries and Under Secretaries) deals with the Government of India, other Governments, and the local officers. The authority in revenue matters is the Board of Revenue, now composed of but one member, while other departments whose chiefs deal directly with Government are those of Police, Education, Agriculture, Public Works, Medical, Jails, Forests, and Excise.

For certain periods Government has its headquarters at Calcutta, but its summer is spent for the most part at Darjeeling, and for a short time it moves to Dacca, in Eastern Bengal.



[Photo Bourne and Shepherd]
WASHING CLOTHES IN A CALCUTTA SUBURB

The province is divided into 27 districts (excluding Calcutta, which is especially provided for), the average area of each being 2,840 square miles, and the average population 1.2-3 millions. Each is under a District Officer, called the Collector, or District Magistrate, as he acts in revenue or civil matters, who is practically responsible for every branch of administration in his area.

The districts are grouped together in Divisions, each in charge of a Commissioner, with powers of control over the district officers and intermediary between them and the Government. These Divisions are five in number.

The districts are for judicial purposes sometimes grouped together under a District and Sessions Judge, and are, with some exceptions, divided into sub-divisions which are again split up into thannas, or police stations, charge of these descending from an officer of the Indian Civil Service to one of the Provincial Civil Service (almost entirely Indian in personnel) to the police officers in charge of the last.

Local self-government has been introduced to some extent in District Boards, Local Boards, and Municipalities, to which power to manage their local affairs has been given. The largest of these is naturally that of Calcutta, the Municipal area of which consists of 32 Wards, which elect 63 Councillors to the Corporation. Fifteen of these 63 seats are reserved for Mahomedans, who, up to the year of writing, 1927, have been returned by exclusively Mahomedan constituents, but will in future be elected by mixed electorates. The Bengal Chamber of Commerce contributes 6 members and the Calcutta Trades Association and the Port Commissioners 4 and 2, respectively, making, with 10 nominated by the Government of Bengal, a total of 85. These 85, after each triennial election, elect 5 Aldermen, none of whom may be of their number, making the complete Corporation consist of 90 members, who annually elect 2 of their number to be their Mayor and Deputy Mayor.

Almost all authority in Municipal matters is vested in the Corporation, which, with the approval of the local Government, appoints a Chief Executive Officer, who, however, except

tion which it does not consider in conformity with law, and to do all things necessary to ensure such conformity.

The great city in charge of the Corporation—the second most populous in the British Empire and the capital of the Province of Bengal—



[Photo Bourne and Shepherd]

SACRIFICE OF A CALF, CALCUTTA

covers an area of 30½ square miles, and has a population of approximately 1,055,000 exclusive of the 22,000 inhabiting the Fort, Maidan, port and canals. It extends from Cossipore in the north to Tollygunge and Garden Reach in the south, and is wholly upon the eastern bank of the Hooghly. The extensive suburb of Howrah, although as much a part of Calcutta as Southwark is of London, is not included in these figures.

The figures given in the current Year Book of the Corporation, Income and Expenditure account (based on preliminary account as the Year Book is published in January) are as follows —

Revenue

Year	Income	Expenditure
1925-1926	Rs 2,12,35,215	Rs 1,86,41,175

Capital

Year	Income	Expenditure
1925-1926	Rs 88,07,947	Rs 25,13,069

The sanitation and the water supply of such a city are, of course, primary responsibilities, and these have for many years given and are still giving the Corporation a great amount of work. Many problems, especially regarding sanitation and the purity of the water supply are of urgent and grave importance. The sanitation problem, which the silting up of its outlet owing to the deterioration of the rivers in the western portion of the Ganges delta has rendered acute, is being courageously tackled, and the great increase in the water supply which the improvements in the course of construction will provide, will, it is hoped, satisfy all requirements in that service.

These labours are supplemented by the lesser ones of controlling 5 huge markets (of which the "Sir Stuart Hogg," or, as it is more popularly



[Photo Bourne and Shepherd]

CARTING STRAW

with regard to assessment and a few other matters, exercises only such authority as is delegated to him by the Corporation, and does not preside at its meetings, but has the right to be present and to speak, though he cannot move a resolution or vote upon one.

The control of the local Government is preserved by clauses in the Act of 1923 giving it power to annul any proceedings of the Corpora-

known, "The New Market" is the largest), of the management of 89 free primary schools, in which on March 31st, 1926, there were 10,203 pupils for whose instruction 315 teachers were provided. The amount spent on these institutions in 1925-26 was Rs 1,11,095. Remaining activities are the provision of dispensaries, maternity homes, dhobi khana, pilgrims' rest houses, milk kitchens, where barley and milk are given free of charge to babes up to the age of 2½ years, morning and evening. A crematorium is also provided and what is not attended to there may be treated at a disinfecting station or consigned to an incinerator.

The electric lighting of Calcutta under the Corporation has vastly improved during the last few years.

Education

It is very generally believed that Western education has been forced upon the people of India by the English Government, which is consequently blamed, by persons who think that instruction should be in the Indians' own languages and literature, for all the economic and political difficulties which seem to owe their existence to the influence of Western thought. It is, however, a fact that there was little, if any, desire on the part of the East India Company in its early days, or of its representatives in the East, to introduce Western learning into India. Indeed the Company in 1814 expressly instructed the Governor General to leave the inhabitants "to the practice of giving instruction in their own homes," and it was not until Hare had started teaching and the Medical College of Calcutta had been established in 1835 for the instruction of Indians in Medical Science as practised in the West, following the teaching in English of Schwarz at Madras and Marshman and Ward at Serampore, that Lord Bentinck, on Macaulay's advice, accepted the new departure and provided funds for secondary schools and colleges where the knowledge of the Occident should be taught in English.

There was also a great impetus given to the desire of proficiency in English by the establishment of the freedom of the Press, an impetus which was again accelerated by the ordinance of Sir Henry Hardinge, in 1844, that preference in Government service would be given to those who had profited by Western education. Nothing more was needed to establish its pre-eminence, and the continual expansion of facilities for its attainment being called for, they have been bestowed as far as funds have been available. It has, therefore, been the economic value of Western knowledge which has proved the chief factor in its diffusion, and of this value the initiation of trade with India must be acknowledged the first cause.

In Calcutta to-day the educational advantages are many and various. At the head of them stands the University of Calcutta which was founded in 1857, and comprises no fewer than 58

affiliated colleges with about 30,000 scholars. In its immediate vicinity are the Presidency College, the University College of Science, and the University Law College, and but about half a mile away stands the great congeries of buildings which includes the Medical College, the Eden Hospital, the Prince of Wales Hospital, and an Eye Hospital, all under the direction of the principal of the Medical College, and available for the education of its students.

Connected with these, but having a frontage on Central Avenue, is the School of Tropical Medicine and Hygiene, with a hospital for the treatment of tropical diseases, where, as at the Medical College, there are a large number of students for whose accommodation commodious hostels are provided within a short distance. In the eastern quarter of the city the Campbell Hospital provides for the study of infectious diseases, and all these institutions have fine operating and dissecting rooms, with large lecture theatres.

The educational requirements of the Anglo-Indian and European communities are met to a great extent by the colleges and schools supported by the Roman Catholic and Anglican Churches. Of these the largest is that founded in 1834 by the Fathers of the Society of Jesus, which owed its first establishment to the generosity of two citizens, of whom one gave his residence to the Fathers and the other supplied furniture for the college and money for its initiation. It now occupies, as stated elsewhere, the building which used to be the Sans Souci Theatre, in Park Street, and other structures have been added in its large compound, to provide for the tuition of more than 500 scholars, of whom very many are boarders. Here the Reverend Father Lafont, its rector for many years, succeeded in erecting the first spectroscopic observatory in India, and earned for himself a reputation second to none as a meteorologist.

Scattered over the city, in Dhurumtollah, Bow Bazar and elsewhere, the Roman Catholic Church has other schools for boys and girls, where a great number are instructed. Of those for girls the most centrally situated, and the best known, is the Loreto Convent, in Middleton Row, in connection with which is conducted a similar institution in the hills at Darjeeling.

The Anglican community has St Paul's Cathedral College and School in Amherst Street, a school at St James's, Lower Circular Road, at St Paul's, Scott's Lane, a college for girls in Elgin Road, all of which are well patronised, as are the corresponding ones at Darjeeling.

Of others not closely allied to either of these bodies is La Martiniere College, in Loudon Street, founded by General Claude Martin, who died in 1800, but his benevolent intentions were thwarted by the Courts for some thirty-five years, the College not being opened until 1836. The bequest amounted to two lakhs of rupees, with another lakh and a half "to add to its perma-

nency', but before it was built the capital had reached a total of nearly ten lakhs. In 1907 the sum in the hands of the Accountant General amounted to seventeen lakhs, and this has recently been supplemented by bequests from Sir Paul Chater (in old boy) and Sir Percy Newson. The school is "for the Christian inhabitants of Calcutta," but these are of varying complexions, and include at times children from distant Armenia or from Greece. The building allotted to the boys is a fine two-storey one, with large playing fields, and is surmounted by a dome, the interior of which serves for its library. The school, with a similar institution for girls on the opposite side of Rawdon Street, maintains, educates, and starts its foundationers on their careers. They generally number about 100 boys and 50 girls. Boarders and day scholars are admitted on payment, and the staff, which is predominantly European, has a great reputation for turning out well-educated young people of sterling character. Its Anniversary and Prize Day is one of Calcutta's important functions.

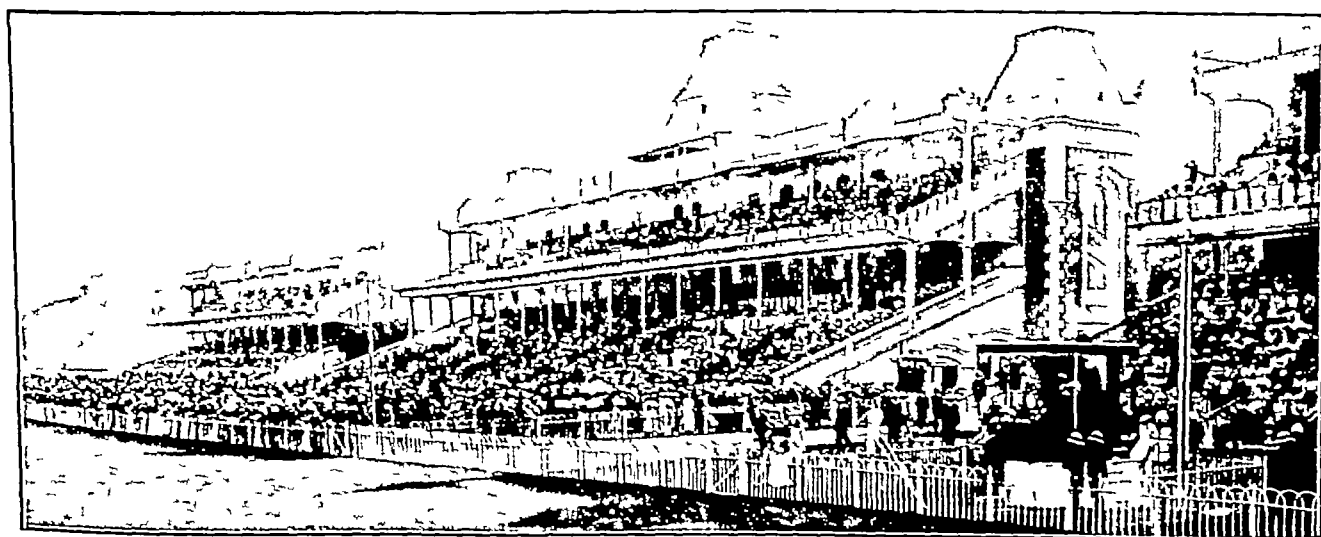
Amongst the other schools of note are the Armenian College, in Free School Street, which occupies the house said to have been the birthplace of William Makepeace Thackeray. This college is liberally supported by the great Armenian merchants, who have contributed so largely to the improvement of the city. Others also include the Bethune College for Indian girls, the first of its kind in Calcutta, which was founded in 1850 by the Hon I. E. D. Bethune, who was Law Member in Council in 1848, and took a keen interest in all educational matters until his death

in 1851. The New Islamia College, recently erected in Wellesley Street, is an excellent building, and provides for the increasing number of Mahomedan students and their special courses of study. Mahomedans, it should be mentioned, have not, so far, taken so much advantage of education as have the Hindus.

Special lines of study are provided for in the Bengal Engineering College, at Seebpore, the Veterinary College, at Belgachia, the Government School of Art, in Chowringhee, the Sanskrit College and the Bishop's College, in Lower Circular Road (where the curriculum is now wholly theological), and in the Park Street School of Music.

Missionary effort in education in Calcutta is very noteworthy. Schools for the afflicted also are not wanting, including one for the deaf and dumb, and one for the blind (recently enlarged) at Behala.

Notwithstanding all these facilities in the capital of Bengal, those provided in the smaller towns and in the villages of the province decrease at a very rapid rate to the vanishing point, and although the percentage of census "literate" to the population was in the year 1924-25 7.33 in the case of males and 1.68 in that of females, the number of "literate" in the older signification of the word, "those acquainted with literature," would probably not be more than a quarter of the number. Many philosophers question the advantages of education, and acquaintance with the uneducated and educated in India rather supports their view, for the former seems a happier and more virtuous citizen than the latter, though his clothing be scantier and his home of mud.



[Photo Johnston and Hoffmann.]

RACE COURSE, VICEROY'S CUP DAY, CALCUTTA

COMMERCIAL CALCUTTA.

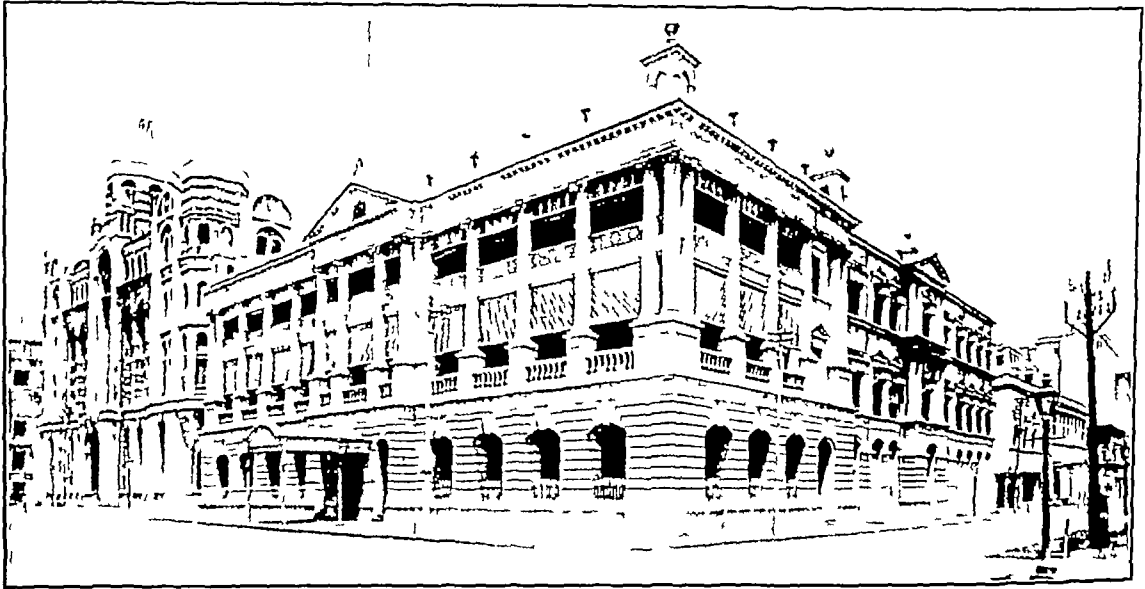
JAMES FINLAY and CO , LTD , Merchants and Agents, 1, Clive Street

No thoroughfare in any city in the East is comparable for the number and wealth of its firms with Clive Street and its vicinity, so named after the founder of the British Empire in India. In the centre of it stands the monument commemorating the victims of the Black Hole of Calcutta and marking the actual site of the trench into which their bodies were thrown after they had been taken from the terrible dungeon within the walls of old Fort William that stood close by and has long been swept away.

The Clive Street district with its lofty and magnificent office buildings has become the hub of commercial India and one of the most vital and

built especially for them in 1896, should be the address of the renowned Scottish firm of James Finlay and Co , Ltd , one of the oldest mercantile houses in the British Empire, and one with a history that few, if any, can equal? James Finlay and Co , Ltd , is its modern style, dating from 1909, when the present company was formed. Originally it was James Finlay and Co , a name that permeates the history of British commercial enterprise since 1750, when the concern was founded in Glasgow.

In 1798 Messrs James Finlay and Co purchased the Ballindalloch Works, where they commenced cotton-spinning, and met with such



**No 1 CLIVE STREET
OFFICE BUILDING OF JAMES FINLAY and CO., LTD, CALCUTTA**

influential centres of the world's trade, especially in jute and tea. Not far from the monument mentioned is a handsome three-storey building standing in dignified separation from the neighbouring edifices, and with nothing to indicate what it is and who are its occupants. Apparently anything in that connection is unnecessary. In the old days in Calcutta name-plates and sign-boards were not needed, everyone knew everyone and their whereabouts, and all Calcutta—commercial Calcutta, at any rate—knows who James Finlay and Co , Ltd , are. Not for them the necessity for modern publicity methods nor for even their name on their impressive and stately building. Is it not No 1 of the great street, and is it not in keeping with the story of Calcutta's wonderful development that No 1, Clive Street,

success that in 1801 they bought the Catrine Spinning Mills, near Mauchline, on the banks of the River Ayr, where in 1805 they started power-loom weaving. In 1808 they further extended their cotton business by the purchase of the Deanston Works, on the banks of the River Teith, near Doune, Perthshire.

It was their great progress in the cotton industry that first caused them to turn their attention to foreign countries as markets for their productions. They first opened up connections with the Continent of Europe, where for many years they carried on extensive trading operations at Dusseldorf and Frankfort-on-the-Main, and were long the principal exporters of cotton yarn from Great Britain to Germany and other parts of the Continent. Before that trade had assumed any

proportions in Manchester, Messrs James Finlay and Co were large shippers of wools purchased in that market, where, in 1880, they established a branch house

During the time when Napoleon was endeavouring to crush the trade of Great Britain, Messrs James Finlay and Co, finding their trade on the Continent very much disturbed, and that they were excluded from their ordinary channels of commerce, resorted to other expedients, and opened branch establishments in Heligoland, Malta, and Gibraltar, whence they carried on their operations with both the North and South of Europe, assisted by a staff of travelling agents, who attended to the transit of the goods, which at that time was both circuitous and dangerous. At this period, and to facilitate their difficult and complicated Continental business, they, in 1809, in conjunction with Mr John Hodgson, father of the late Mr Kirkman Hodgson, M P, Governor of the Bank of England, opened a house in London under the style of Finlay, Hodgson, and Co. That firm, after a successful career of more than half a century, was amalgamated with Messrs Baring Bros and Co, now Baring Bros and Co, Ltd.

Another important event in the history of Messrs James Finlay and Co was when in 1806 they took over the business of Laston, Alston and Co, extensive exporters of cotton and other goods to Nassau, in the Bahama Islands, for the supply of the Spanish, West Indian and South American markets. That connection led to the establishment of houses at New York, New Orleans, and Charlestown, U S A, for the sale of goods and purchase of cotton wool, and these operations were carried on for many years on a large scale.

It was in 1816 that Messrs James Finlay and Co first turned their attention to India, and were the first Scottish firm to open up direct trade connections with that country. In the year mentioned they opened a branch at Bombay, under the name Finlay, Muir and Co, and in 1870 they became established under the same designation at Calcutta, where now Messrs James Finlay and Co, Ltd, have their head offices for the Indian Empire, their other branches being at Madras, Karachi, Chittagong, and Colombo. The name of Finlay, Muir and Co, under which the Indian branches were conducted, was changed to James Finlay and Co, Ltd, when the present company was formed in 1909, as already indicated.

Naturally Messrs James Finlay and Co, Ltd, are very prominent and influential in the commerce and industry of Calcutta. They are, for instance, managing agents of the Champdany and Wellington Jute Mills, which have 12,000 looms turning out per annum two-and-a-half crores of hessian cloth and one-and-a-half crores of sacking and give employment to about 10,000 persons.

They are also managing agents of the jute pressing works of Golabarry and Co, Ltd, Chittpore Road, Calcutta, and M Sarkies and Son, Naraingunge. The firm are the largest exporters of gunnies to South Africa, and their exportations of the same material to Java, South America, United States, and other parts of the world are likewise very extensive.

In the tea industry also Messrs James Finlay and Co, Ltd, are similarly very influential. They are managing agents of the following companies, which have a total area of 270,000 acres under cultivation, and give employment to about 70,000 Indians, besides a large staff of superintendents, managers, and assistants sent from Scotland.

The Consolidated Tea & Lands Co, Ltd
The Amalgamated Tea Estates Co, Ltd
The Anglo-American Direct Tea Trading Co, Ltd
The Kanan Devan Hills Produce Co, Ltd
Chargola Tea Association, Ltd
Chubwa Tea Co, Ltd
Brahmaputra Tea Co, Ltd
Barroora (Silhet) Tea Co, Ltd
Borhat Tea Co, Ltd
Dharmu Tea Co, Ltd
Noyapara Tea Co, Ltd
Killing Valley Tea Co, Ltd
Sapote Tea Co, Ltd
Dhunsri Tea Co, Ltd
Jungpura Tea Estate
Gopaldhara Avongrove Tea Estates
Achabam Tea Co, Ltd
Doloi Tea Co, Ltd

Messrs James Finlay and Co, Ltd, ship great quantities of tea to all parts of the world, especially to the United Kingdom and Australia.

They are very large importers of piece-goods and general merchandise, and transact an extensive trade as insurance, shipping, and general commission agents, being agents for the following.

Royal Insurance Co, Ltd
Phoenix Assurance Co, Ltd
South British Insurance Co, Ltd
Java Sea & Fire Insurance Co, Ltd
Union Insurance Society of Canton, Ltd
Queensland Insurance Co, Ltd
Clan Line of Steamers
Houston Line of Steamers
Ellerman's Wilson Line of Steamers
East Asiatic Co, Ltd
Central Provinces Manganese Ore Co, Ltd
Belsund Indigo Concern
Bengal-Dooars Railway Co, Ltd
United Provinces Sugar Co, Ltd

The firm's head offices are at 22, West Nile Street, Glasgow, and they also have offices at 34, Leadenhall Street, London, E C, and Spellow Place, Liverpool. Their telegraphic address at Calcutta is "Mercator," and they use all the standard codes.

BURN and CO ,
 BURN and CO , LTD., } Howrah Iron Works, etc , 6 and 7, Clive Street

The combination of industrial and commercial interests of Messrs Burn and Co and their associated companies is so great that an adequate description of it would necessitate a separate volume. Its story goes back to 1781, when a retired veteran of the Indian Army, Colonel Archibald Swinton, established a small workshop, chiefly for the repair of ships, at Howrah, which at that time was a mere settlement on the west side of the Hooghly River, immediately opposite to the site selected by Job Charnock about a hundred years previously as the place where the town of Calcutta should be built. The venture was successful from the start, and after various changes in the ownership, the name of Burn first appeared in 1799, when a Mr Alexander Burn became the chief partner. Soon afterwards the firm became known as Alexander Burn and Co.

It must be remembered that the small workshop which Colonel Swinton had started was before the use of the steam engine in industry, for although James Watt had taken out his first patent in 1769, that crude engine was only utilised for mining operations until 1785, when it was applied to a cotton factory. The beautiful and romantic sailing ships coming up the Hooghly provided ample scope for the activities of the Howrah business, already beginning to be well known for the excellence of its workmanship and supplies. The advent of Mr Alexander Burn in 1799, as already indicated—the year, by the way, in which Pitt imposed the first income tax in England—occurred when the application of the steam engine to all kinds of industrial activities had made considerable progress, and thereafter the equipment of Messrs Burn and Co's establishment reflected each new improvement in ways and means. Nasmyth's steam hammer in 1839 was followed by many wonderful contrivances that are commonplace to-day, and when electricity began to revolutionise engineering and kindred activities, the works of Messrs Burn and Co, which had grown immensely, were among the first in the Orient to exemplify the new era upon which the industrial world had entered.

The development of the agricultural and industrial resources of India was most marked in the early nineties of last century, railways were being projected, rivers had to be bridged, manufacturers required machinery of a more modern character, new ventures had to be effected with up-to-date plant, and so numerous were the demands made in that connection upon Messrs Burn and Co that, for the purpose of being better able to meet them, the firm was formed in 1895 into a limited liability company under the style of Burn and Co Ltd. The former partners, retaining the old firm's name of Burn and Co, became managing agents of the new company and ceased to trade on their own account. This similarity of name has often caused some confusion,

but the relations between Burn and Co, Ltd, the company, and Burn and Co, the firm of managing agents, has become clearer to the public since the latter became, in addition, managing agents of the Indian Iron and Steel Co, Ltd, and the Indian Standard Wagon Co, Ltd.

Probably nowhere in the world is a greater contrast afforded between initial effort and eventual development as that which is presented between the vast Howrah works of Messrs Burn and Co, Ltd, and the little undertaking started as its nucleus by Colonel Swinton nearly 150 years ago. Few, if any, concerns in the British Empire demonstrate more impressively such rapidity in the adoption of every new machine tool, or improved way of doing things, than this great place of many inventions that is representative of everything which scientific and mechanical ingenuity has devised or can suggest for the perfection of process and result in every conceivable form of metal and wood working.

The works cover an area of about 40 acres, and give employment to about 5,000 persons. They are divided into several distinct departments, viz—Rolling Stock, Bridge Building, Permanent way, Ship-building, Foundry, General Engineering, and Stocks of the iron, steel, and machinery products in which the firm transact a very large trade as merchants. The huge establishment is permeated by many miles of track of the East Indian and Bengal-Nagpur Railways, and its admirable transport facilities and resources are greatly enhanced by its extensive river frontage, including two jetties, 1,100 feet long, with three gantry cranes. On that frontage are the company's ship-building yards, where all kinds of vessels and the biggest steamers on the Hooghly are built. It will be well understood that with the immense numbers of vessels which call at Calcutta there must necessarily be repairs of all kinds to be effected, and in that connection Messrs Burn and Co, Ltd, have been, and are, entrusted with large and important contracts.

There is nothing which the firm cannot do, from the manufacture of the smallest utilities to the construction of railways and rolling stock. One of their contracts included the construction of 5,000 railway wagons. Their record as general and constructional engineers is exceptionally impressive. The Dirountah suspension bridge in Afghanistan is one of innumerable examples of their versatility. That bridge, with a span of 304 feet and a road-way 10 feet wide, was the first steel-rope suspension bridge to be erected in Afghanistan, and spans the Cabul River at the mouth of the Dirountah Gorge, about seven miles from Jalalabad. To enumerate fully the achievements of Messrs Burn and Co, Ltd, is impossible in the restricted space at our disposal, but a few may be mentioned. They constructed, for instance, a large portion of the drainage system

of Calcutta, the tramway system, Buckland Bridge, Kidderpore Bridge, Municipal Market in Lindsay Street, Ochelony Monument, General Post Office, Bengal Club, Bishop's College, St Andrew's, St Thomas's, and other churches in Calcutta, the Lieutenant Governor's residence at Belvedere, tanks for waterworks and oil installations for the Ambala, Howrah, Bhindia, Benares, and Amritsar waterworks, oil storage tanks, with a capacity of more than four million gallons, for the Burma Oil Co. at the Budge-Budge depots, eleven roofs for the Ischapore Rifle Factory, platform roofs for the remodelling of the Delhi railway station, Manipur-Durbar hall, an immense roof over the Gautama—a reclining figure sacred to the Burmese, at Pegu in Burma, together with very many mills, factories, mansions, office buildings, etc., in Calcutta and elsewhere.

In February, 1927, Messrs Burn and Co., Ltd., were amalgamated with Martin and Co., referred to below.

It is interesting to note that on a mural tablet in the offices which Messrs Burn and Co., Ltd., occupied in Hastings Street until 1924, when they removed into their present quarters in Clive Street, are inscribed the following words, "This building was the town residence of Warren Hastings, Governor General of Fort William, in Bengal, 1774-85."

In addition to the Howrah works, Messrs Burn and Co., Ltd., own large factories at Jubbulpore and several at Raneeungee, which supply an endless variety of tiles, bricks, stoneware pipes and refractories.

It was inevitable that the managing agents of a company owning so large a foundry should eventually decide to secure their own supply of pig iron, hence the formation in 1917 of the Indian Iron and Steel Co., Ltd., with Messrs Burn and Co. as managing agents. That company owns what is probably the most up-to-date coke oven and blast furnace plant in the world, turning out

1,000 tons of coke and upwards of 1,200 tons of iron every day, and handling in the process some 7,500 tons of traffic daily in and out of its works.

The success of the Indian Iron and Steel Co., Ltd., led to the flotation of the Indian Standard Wagon Co., Ltd., in 1918, when the Government of India made public its intention of buying a large quantity of rolling stock annually for many years to come. The latter company's works, situated close to those of the Indian Iron and Steel Co., Ltd., whence it obtains electric power and water, have a capacity of about 3,000 broad-gauge wagons per annum, and constitute the most modern and efficient wagon building plant in India.

As managing agents of companies with works at Howrah, Raneeungee, Asansol, and Jubbulpore, with branch offices at Rangoon and Bombay, and with agents selling "Burn" pig iron in almost every civilised country, Messrs Burn and Co., Ltd., have made their name known not only all over India, but throughout the world. The telegraphic address of both Messrs Burn and Co., Ltd., and Messrs Burn and Co. is "Burn," Calcutta, and their codes are the A B C 5th edition, Bentleys, and private.

Messrs Burn and Co., Ltd., are agents for

The Levland & Birmingham Rubber Co., Ltd., A Revrolle & Co. Ltd., C. A. Parsons & Co., Ltd., Newcastle on Tyne, Alfred R. Tittersall & Co. London, H. L. Goodman & Sons, Liverpool, Kerner, Greenwood & Co. Ltd., King's Lynn, Pulsometer Engineering Co. Ltd. Reading, Siebe Gorman & Co., Ltd. London Robert, Herth & Lowmoor, Ltd., Bradford Wm. Arnott & Co., Courtbridge, Wallis & Stevens Ltd., Basingstoke, H. Morris & Co., Farnworth Bolton The Weldless Steel Tube Co., Ltd. Wednesfield, The Parsons Motor Co. Ltd., Southampton, The American Steam Pump Co. New York B. K. Morton & Co., Ltd., Sheffield, The Deming Pump Co. Salem Ohio, H. L. Leroy & Co., Ltd., London Barber Asphalt Co. Chicago, Champion Blower & Forge Co., Lancaster, U.S.A., Hayes Track Appliance Co., Richmond, U.S.A., Plomo Speciality Manufacturing Co. U.S.A., Sidney Minne & Co. Ltd., U.S.A. Goodwin Buisby & Co., Leicester

MARTIN and CO., Engineers, Contractors, and Merchants, 6 and 7, Clive Street

MESSRS MARTIN AND CO., established in 1875 by the late Sir Aquin Martin, Kt., have carried out many important contracts in connection with the supply of water and drainage schemes and other public works in all parts of India. They were pioneers in introducing light railways, which are usually constructed on district roads, and which have proved of great benefit in connecting outlying areas, rich in agricultural produce, with main lines of railways, and they have financed and con-

structed many railway sections. They have also constructed numerous fine buildings in Calcutta and throughout India, including the Victoria Memorial Hall shown on page 30.

In 1927 the extensive interests controlled by Messrs Burn and Co., described in the preceding article, were amalgamated with Messrs Martin and Co., but are continued under their respective names.

BEGG, DUNLOP and CO., LTD., Merchants and Agents, 2, Hare Street

The business of Messrs Begg, Dunlop and Co., Ltd., was founded in March, 1856, by Dr David Begg, Mr Robert Dunlop, and Mr Henry Christie. In the early sixties Sir Donald Macfarlane, afterwards M.P. for Argyllshire, and Mr H. H. Sutherland, became partners and continued

so until 1904 and 1888 respectively. In the sixties also Mr Duncan Macneill and Mr John Mackinnon became partners, but retired from the firm in 1872 and established the business of Messrs Macneill and Co. Many changes have since occurred in the personnel of the firm, which

was formed in 1922 into a limited liability company, the directors now being Messrs A B Shakespear, C I E, D S K Greig, T D Edleston, W G Figg, and T Lamb



OFFICE BUILDING OF
BEGG, DUNLOP and CO, LTD

Messrs Begg, Dunlop and Co, Ltd, are Managing Agents of

Alliance Jute Mills Co, Ltd
Alexandra Jute Mills Co, Ltd
Waverley Jute Mills Co, Ltd
Craig Jute Mills, Ltd

which give employment to about 10,000 persons, and have a daily output of 190 tons

Messrs Begg, Dunlop and Co, Ltd, are very largely interested in the tea industry of Northern India. When the Tea Districts Labour Supply Association was formed in 1880, they were appointed its Secretaries, and still act as such.

They are also Managing Agents of the following tea companies, which have an area under cultivation of about 8,584 acres, and produce a crop of 51,491 maunds

Amluckie Tea Co, Ltd
Baghami Tea Co, Ltd
Borahi Tea Co, Ltd
Bullbarrie Tea Co, Ltd
Dejoo Valley Co, Ltd
Margaret's Hope Tea Co, Ltd
Ranicherra Tea Co, Ltd
Roopacherra Tea Co, Ltd
South Cachai Tea Co, Ltd
Sungma Tea Co, Ltd
Titabui Tea Co, Ltd
Tirrihannah Co, Ltd
Tyroon Tea Co, Ltd

They are also Managing Agents of the Mulajore Land Co, Ltd, and the Bhatpara Power Co, Ltd, which latter supplies the electric power for their jute mills

BEGG, SUTHERLAND, and CO, LTD

Although this company has not always traded under its present title, it is probably the oldest mercantile house in Cawnpore. There are no records as to the date when their predecessors in the business commenced trading, but old partnership deeds in the possession of the company show that John Kirk and Co were established as merchants at Cawnpore prior to 1842. The name of

the firm was subsequently altered to Bathgate, Campbell, and Co, and in 1856 it became Begg, Christie and Co, both Dr David Begg and Mr Henry Christie having been partners in the earlier firm. Mr Christie and all his family were killed in the Cawnpore massacre in 1857. In the 'sixties the name of the firm was again changed to Begg, Maxwell and Co, and it is interesting to note that in those days the firm was closely connected with the Elgin Cotton Mills, founded by Mr Hugh Maxwell (partner in Begg, Maxwell, and Co), a business connection which ceased in 1872, to be revived, however, more than forty years later, when Mr Ralph Maxwell, son of the late Mr Hugh Maxwell, once again entrusted the management of the Elgin Mills affairs to the firm. In 1872 the name of the firm was altered to Begg, Sutherland and Co, its present title, and the business up to 1894 was mainly confined to that of indigo seed and country-produce merchants, though large experiments in the growing and curing of tobacco at the Government farm at Gazipore were carried out by the firm for some years. In 1894 Messrs Begg, Sutherland and Co launched an enterprise under the title of the Cawnpore Sugar Works, Ltd, which was the first pure-process sugar refinery established in Northern India. This concern passed through many vicissitudes in the early part of its career, but in recent years it has entered upon a period of remarkable prosperity, and can now boast, in addition to the original refinery, two cane-sugar factories and two large distilleries.

Undismayed by the fate of the pioneer sugar undertaking in Behar, the India Development, Ltd, Messrs Begg, Sutherland and Co, launched the Champaran Sugar Co, Ltd, in the year 1905, and later the Ryam Sugar Co, Ltd, and the Samastipur Central Sugar Co, Ltd.

The firm are also local managers of the Cawnpore Electric Supply Corporation, Ltd, the first electrical enterprise of its kind established outside the Presidency towns.

Messrs Begg, Sutherland and Co, Ltd, also count amongst their agencies a brush-making concern under the title of Brushware, Ltd.

The offices of Messrs Begg, Dunlop and Co, Ltd, form a large corner block of four storeys in Hare Street and Church Lane, and on the side in the latter thoroughfare, just at the corner, there is embedded a marble tablet bearing the following words

"On this site formerly stood the residence of David Hare, born in 1775, died 1842"

David Hare, it may be mentioned, was the pioneer of Western education in India.

The telegraphic address of Messrs Begg, Dunlop and Co, Ltd, is "Dunbegg," Calcutta, and the codes used by them are the Western Union A B C 5th edition, and Bentley's. Their London correspondents are Messrs Begg, Roberts and Co, 138, Leadenhall Street, E C 3.

GEORGE HENDERSON and CO., LTD , Merchants and Agents, 101-1, Clive Street.

THE great jute industry of Calcutta is of comparatively recent origin. The first jute mill in Bengal was started at Rishra in 1855 by Mr George Acland, who had to get for it men and machinery from Dundee. After various vicissitudes the Acland interest in that mill ceased in 1867, and the company which had been formed in connection with it was wound up in 1868.

A very different result attended the efforts of the next jute pioneer, Mr George Henderson, founder of the firm of George Henderson and Co., under whose auspices a jute mill was established by the Borneo Company, Ltd., in 1859. To the latter company is due the credit of introducing the power loom for the manufacture of jute in Bengal. The first weaving done by the Borneo Company's mill was on 250 hand looms, which wove cloth for potato bags. Unhampered by the difficulties which had burdened the Acland undertaking the Borneo Company, Ltd., made rapid progress, doubling its works in 1864, and clearing its capital twice over. In 1872 the mills were taken over by the present Barnagore Jute Factory Co., Ltd., also controlled by Messrs George Henderson and Co., Ltd., and the remarkable development which they have attained during recent years has been contemporaneous with the vast growth of the jute industry. During the years 1920-1926 the mills were rebuilt on the most modern scale with the latest machinery and all devices that have been invented for the perfection of process and result in the manufacture of jute products. The land occupied is 60 acres in extent, the looms number 1,744, and the output is 35,000 tons of cloth and bags per annum.

Messrs George Henderson and Co., Ltd., are also managing agents of the Bally Jute Co., Ltd., formed in 1918, whose mills, originally owned by the Barnagore Jute Factory Co., Ltd., contain 825 looms, and turn out annually about 15,000 tons of products.

In 1880 Messrs George Henderson and Co. became partners in the large jute-baling business operated under the name of M. David and Co., and became sole proprietors of it in 1925.

In the tea industry also Messrs George Henderson and Co. have long occupied an important position, and are managing agents of the Nahorjan Tea Co., Ltd., Kathoni Tea Co., Ltd., Iringmara Tea Co., Ltd., Dolaguri Tea Co., Ltd., Hunwal Tea Co., Ltd., and secretaries of the Dessai and Purbattia Tea Co., Ltd. The total area of land under cultivation belonging to these tea companies is 5,000 acres.

The firm are also managing agents of the Shampore Coal Co., Ltd. The total labour force employed by them in their varied interests amounts to upwards of 45,000 persons.

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Insurance is another important section of their business, and they are agents for the following:

North British & Mercantile Insurance Co., Ltd.
Insurance Office of Australia
Ocean Marine Insurance Co., Ltd.
London Assurance Corporation
Union Insurance Society of Canton, Ltd.
Scottish Insurance Corporation, Ltd.
Royal Exchange Assurance Co., Ltd.

The concern was established, as already indicated, by Mr George Henderson, who had assisted, and eventually became a partner, in the business of his father, also named George Henderson, a ship-owner, in Liverpool. In 1850 Mr George Henderson, junior, opened and took control of the offices at No. 7, Mincing Lane, London, E.C., still occupied by Messrs George Henderson and Sons, who are the London correspondents of Messrs George Henderson and Co., Ltd.

Early in the fifties Mr George Henderson, junior, went to Calcutta and founded the firm of Henderson, McClardy and Co., general merchants, who assumed the designation of George Henderson and Co. in 1854.

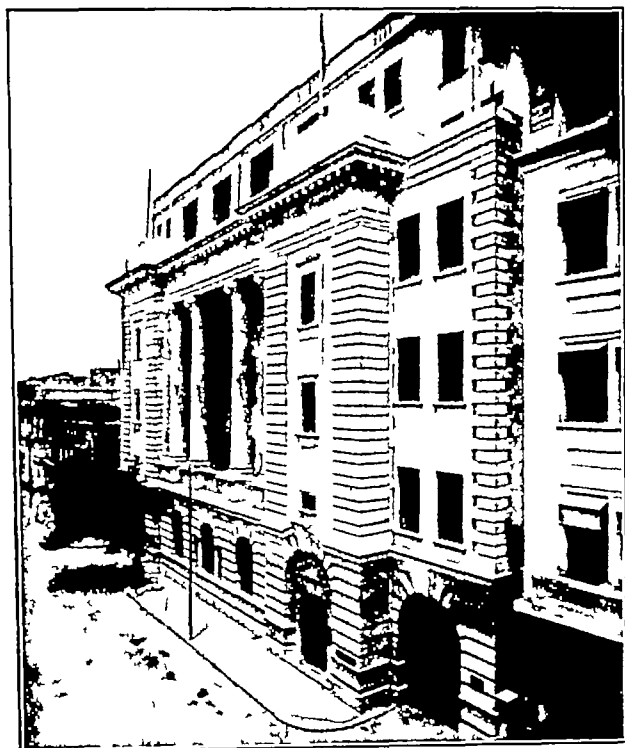
Until 1864 jute cuttings, or "butts," as they were then called, had been regarded as waste material. In that year, however, it was proposed that the owners of Barnagore Jute Mills should erect a paper mill for the conversion of their jute cuttings into paper. This resulted in the construction in 1865 of the Bally Paper Mill, which was the second undertaking of the kind to be started in India—the first, at Serampore, having ceased to operate for some time. The Bally Paper Mill was eventually transferred to the Titaghur Paper Mills.

In 1885 Mr George Henderson died, leaving his interests in the business to his two eldest sons, George, who died in 1906, and James. In 1925 the firm was formed into a limited liability company, the present directors resident at Calcutta being Messrs G. P. Mackenzie, R. R. Will, G. T. G. Milne, and J. T. Finlayson.

In 1880 Messrs George Henderson and Co. transferred their offices from Mangoe Lane to 100, Clive Street, which had originally been the old Post Office. In 1921 they removed into their present magnificent offices at 101-1, Clive Street, which are amongst the finest in Calcutta. The building belongs to the North British and Mercantile Insurance Co., Ltd., who, it will be noticed, are amongst the firm's agencies, and occupy the first floor. The ground floor is occupied by Lloyds Bank, and the other two floors by Messrs George Henderson and Co., Ltd., whose telegraphic address is "Scotswood," Calcutta, and the codes used by them are the A.B.C., Bentley's, and Scott's.

TURNER, MORRISON and CO., LTD , Merchants and Agents, 6, Lyons Range

The magnificent office buildings recently erected in Calcutta make the city the most noteworthy in that connection in the Orient. Amongst the finest of them is the one owned by Messrs Turner, Morrison and Co, Ltd, which was erected for them in 1925. It covers about an acre of land,



**OFFICE BUILDING OF TURNER,
MORRISON and CO, LTD, CALCUTTA**

including part of the site originally occupied by the firm, is six storeys high and magnificently appointed throughout with electric elevators and all the most modern conveniences and improvements.

The building is worthy of the great influence and importance of Messrs Turner, Morrison and Co, Ltd, in the commerce and industry of Calcutta. Their business was started in 1851 under the style of Turner, Cadogan and Co, which was changed in 1863 to Turner, Morrison and Co. In 1887 the firm established a branch at Bombay, which has since become one of the principal shipping and managing agency houses in that city. In 1904 another branch was opened at Chittagong. With such important centres as these in India, and being in communication through their London and Liverpool connections, with the principal trading marts of the Western world, the business continued to expand greatly, and in 1913 the firm was turned into a private limited liability company.

Messrs Turner, Morrison, and Co, Ltd, are amongst the largest shipping houses in Calcutta, and a walk along the banks of the Hooghly, from the Howrah Bridge to the docks at Kidderpore will reveal many vessels under their control and

agency. A very large amount of chartering business is done in Calcutta, and a glance at the principal morning newspapers of the city reveals a long list of names of arriving or departing vessels, controlled in their voyages by Messrs Turner, Morrison and Co, Ltd.

The firm are the managing agents of the Asiatic Steam Navigation Co, Ltd, which has a fleet of 17 steamers with a gross tonnage of about 80,000. This company trades principally round the coast of India to Burma and Java, and was in fact the originator of the Java-India trade.

They are also agents for Andrew Weir and Co's lines to the River Plate, West Coast of South America, and the United States, the Societa Veneziana de Navigazione a Vapore, and the Bombay-American Line, Bombay. Further more, they are joint agents for the Anchor-Brocklebank and Well Line, which runs from Calcutta to London, Dundee, Liverpool, and the Continent.

In no country in the world is the custom of one firm acting as managing agents for many others more developed than in India. Examples of the extent to which that custom has developed in Calcutta will be found by reference to our reviews of its leading commercial houses, and amongst them Messrs Turner, Morrison and Co, Ltd, occupy a very prominent position in that connection. They are also, for instance, managing agents of the Shalimar Works, Ltd, engineers, ship-builders, and boiler-makers, which was started in 1890 in a small way to attend to minor repairs to steamers, but so steadily developed in size and scope of operation that in 1896 a limited company was formed with Turner, Morrison and Co, Ltd, as managing agents. The works continued to prosper and are now one of the largest, best equipped and organised engineering establishments on the river for all classes of ship repairs and general engineering. The company specialise in all branches of marine engineering, including, of course, repairs, ship-building in the form of coasting vessels of any size up to 250 feet in length, river craft and pontoons, also foundry and smithy work.

The works embrace a gas-cutting and electric welding shop. It is now universally recognised that electric welding is fast supplanting the previous methods of welding metals, and in many instances rivetting, to such an extent that no up-to-date workshop is complete without an electric-welding plant. The process adopted is that of the Quasi-Arc Co, Ltd, of Grosvenor Gardens, London, for whom Messrs Turner, Morrison and Co, Ltd, act as agents throughout India. This process is largely used by railways and engineering concerns, as well as by all sorts of factories, etc., and the sales of plants and electrodes are steadily on the increase.

In 1907 a branch of the Shalimar Works was opened at Chittagong to take its part in the deve-

lopment of that port, and to undertake the repairs to machinery, etc., in the tea gardens districts.

The Shalimar Paint, Colour and Varnish Co., Ltd., was founded in 1902 by Messrs. Turner, Morrison and Co., Ltd., who act as its managing agents. That company is the largest undertaking of its kind in India, and in 1911 had the honour of being appointed paint-makers to H. M. the King Emperor. This appointment it still holds. The annual output is about 4,000 tons of paints, varnishes, and similar products. The company contracts largely with the Government of India and the leading railway companies.

Messrs. Turner, Morrison and Co., Ltd., have been for many years largely interested in coal mining, and in 1897 they formed the Lodna Colliery Co., Ltd., which owns properties in the Jhama and Ranagunge collieries. The annual output from these properties is approximately 7 lakhs of tons, classed by the Indian Coal Grading Board as selected grade, the best grade possible. This company also owns a large by-product coke plant.

In 1917 Messrs. Turner, Morrison and Co., Ltd., formed a further subsidiary company to deal with by-products, under the name of the Shalimar Tar, Distillery and Waterproof Manufacturing Co., Ltd. This company manufactures road tar, pitch, creosote, anthracene, and other similar products, and its road tar is largely used for road-making purposes in Calcutta and other parts of India.

The manufacture of shellac is another industry in which Messrs. Turner, Morrison and Co., Ltd., are interested, and they are the managing agents of Angelo Bros., Ltd., who are without exception the largest manufacturers of shellac in India. Their factory, established seventy years ago, is situated at Cossipore, about three miles from Calcutta.

It is also of interest to note that Messrs.

Turner, Morrison and Co., Ltd., through their branch at Bombay, are the managing agents of the Bombay and Persia Steam Navigation Co., Ltd., whose principal trade is between Bombay, Red Sea and Persian Gulf ports. This company is by far the largest pilgrim carrier between India and Mecca.

The other important undertakings controlled by Messrs. Turner, Morrison and Co., Ltd., as managing agents are —

The Shalimar Rope Works, Ltd.
Retriever Flotilla Co., Ltd.
The Jhama Sulphuric Acid Co., Ltd.
Thornycroft (India) Ltd.
Alecck Ashdown & Co., Ltd., Bombay
Globe Manufacturing Co., Ltd., Bombay
The New Union Flour Mills, Ltd., Bombay
Allen Liversidge (India), Ltd., Bombay

The comprehensive nature of the business of Messrs. Turner, Morrison and Co., Ltd., may be indicated by the fact that if a steamer meets with an accident and arrives in a damaged condition at Calcutta the firm can discharge her, repair her, paint her inside and out, engage the requisite cargo for her return voyage, load her, insure her hull and cargo if necessary, supply her with bunker coal and stores, and despatch her without having to go outside of the concerns which they control, being, it may be added, the only firm in Calcutta who can do so.

The telegraphic addresses of Messrs. Turner, Morrison and Co., Ltd., are "Turners" Calcutta and Chittagong, "Morrison's" Bombay, and "Cossipore" London, and they use all the standard codes.

They are also agents for the following —

Thames & Mersey Marine Insurance Co., Ltd.
Maritime Insurance Co., Ltd.
Union Insurance Society of Canton, Ltd.
Scottish Union & National Insurance Co.
Liverpool Marine, & General Insurance Co., Ltd.
Bombay
The Salt Union, Ltd., Liverpool
Royal Exchange Assurance Corporation, Bombay

KILBURN and CO, Merchants and Agents, Fairlie House, 4, Fairlie Place

MESSRS KILBURN AND Co's business was founded in 1842, the year of the massacre of British troops in retreat from Cabul, and the year also of the capture of the Kyber Pass by General Pollock. The founder of the concern was Mr. C. E. Schoene, who was joined in partnership in 1845 by Mr. E. D. Kilburn, under the style of Schoene, Kilburn and Co. The firm at that time were general commission agents, importers of cotton goods and yarns, silk filatures, French wines and brandies, etc., and exporters of general produce. During the first twenty years of the partnership Messrs. Schoene, Kilburn and Co. shipped from Calcutta a greater quantity of indigo than any other firm.

Indigo planters at that time were making huge annual profits and many of them, confident in the security of their invested capital, resided in England, and left the supervision of their concerns to managers. Parenthetically, it should be men-

tioned here that this prosperity continued with few interruptions until the year 1899, when the discovery of synthetic dyes temporarily checked the cultivation of indigo and caused planters to resort to the manufacture of sugar. The export of this dye continued to be one of the most important branches of the firm's business, although consignments of general produce, including Bengal silk, cotton, hides, and tobacco, were sent more frequently and in larger quantities to Europe.

Mr. Kilburn went on a business trip to China in 1856, and learning, on his return, of the disaffection which was spreading in certain parts of India, he called upon Lord Canning at Government House and offered his personal services and any other help which he might be able to obtain in order to protect the lives of peaceable and law-abiding citizens. The result of the interview was that Mr. Kilburn, with characteristic enthusiasm

summoned a meeting of leading commercial men, and the drawing-room in the firm's former premises in Fairlie Place, which they occupied until the completion of their present building in 1926, on the same site, witnessed the formation of the Calcutta Volunteer Cavalry, of which Mr Kilburn was gazetted Captain. That gentleman lavishly spent both time and money in assisting the Government to suppress the Indian Mutiny, and the services rendered by him were so highly appreciated by the Viceroy that the latter decided to recommend Mr Kilburn for the distinguished honour of a Companionship of the Bath, but Lord Canning died before effect could be given to his desire.

In the earlier years of the firm's existence shipping matters generally played an important part in the general commercial enterprise, and Messrs Schoene, Kilburn and Co became representatives of the then famous East Indian frigate built ships, amongst which were the *Hotspur*, *St Lawrence*, *Lord Warden*, *Superb*, *Winchester*, *Essex*, and many others. Further, the firm had the honour of receiving in Calcutta waters, in 1870, the first steamers of the Blue Cross Line, which made the voyage to India by way of the Suez Canal, opened in the preceding year.

Many changes, of course, have occurred in the personnel of the firm through death and retirement of the various partners, the present partners being Messrs C C Kilburn, C J Elton, E J Oakley, A M I C E, S G L Eustace, and H B Whitby (Consul for Denmark). Mr A L B Tucker, B Sc, is at present in charge of the firm's office in Calcutta, and is also Vice-Consul for Denmark.

Messrs Kilburn and Co's influence and importance may be indicated by the fact that they are managing agents of—

India Navigation & Railway Co, Ltd
Raneegunge Coal Association, Ltd
Birsra Coal Co, Ltd
Parasei Collieries, Ltd
Tata Iron & Steel Co, Ltd, Collieries
Daijeeling & Cinchona Association, Ltd
Kornful Association, Ltd
Kodala, Ltd
New Tea Association, Ltd
Pashok Tea Co, Ltd
Oodaleah, Ltd
Pailhargoomiah Tea Association, Ltd
Maulvie Tea Co, Ltd
Dantmura Tea Co, Ltd
Sylhet Lume Co, Ltd
Barrackpore Electric Supply Co, Ltd
Rusa Engineering Works, Ltd
H Bull & Co, Ltd
Fraser & Co, Ltd

They are agents for—

Assam Co
Goodman Manufacturing Co
Brunton's (Musselburgh)
Richardsons, Westgarth & Co, Ltd
Norwich Union Fire Insurance Society, Ltd
Commercial Union Assurance Co, Ltd
Diamond Drill Syndicate
J Davidson Co
Crushed Limestone Syndicate

Furthermore, they are general agents and supervising engineers for the Cawnpore Electric Supply Corporation, Ltd, and secretaries of the Durrung Tea Co, Ltd.

Messrs Kilburn and Co's telegraphic address is "Tasconium," and they use all the standard codes. Their London correspondents are Messrs Kilburn, Brown and Co, Orient House, New Broad Street, E C.

INDIA GENERAL NAVIGATION and RAILWAY CO, LTD, 4, Fairlie Place

ALTHOUGH a steamer service on the Ganges was inaugurated in 1834 under the control of the East India Co, and was a vast improvement on previous means of locomotion by sailing boats, the river transport was not brought into line with modern requirements until the development of the facilities and resources of the India General Steam Navigation Co, Ltd. That company was formed in March, 1844, with a capital of 20 lakhs of rupees, and started operations with three steamers purchased locally. In the following year two other steamers, which had been built in England for the company, were sent out in sections and erected at Calcutta.

The company, in common with all new ventures, made mistakes and had its experience of ups and downs during its early years, but it grew steadily, and in 1854 possessed six steamers and eight flat bottom boats, eventually called flats.

The Indian Mutiny of 1857 brought continuous and exacting work to the steamer company, as the East India Railway had only advanced to a

distance of 160 miles from Calcutta, and was, therefore, useless for the conveyance of troops and munitions of war to the scene of the great struggle which centred at Delhi, Agra, Lucknow, and Cawnpore. The entire fleet was taken up by Government, and rendered valuable service in the transport of men and material as far as Allahabad, whence they were taken by road to the firing line.

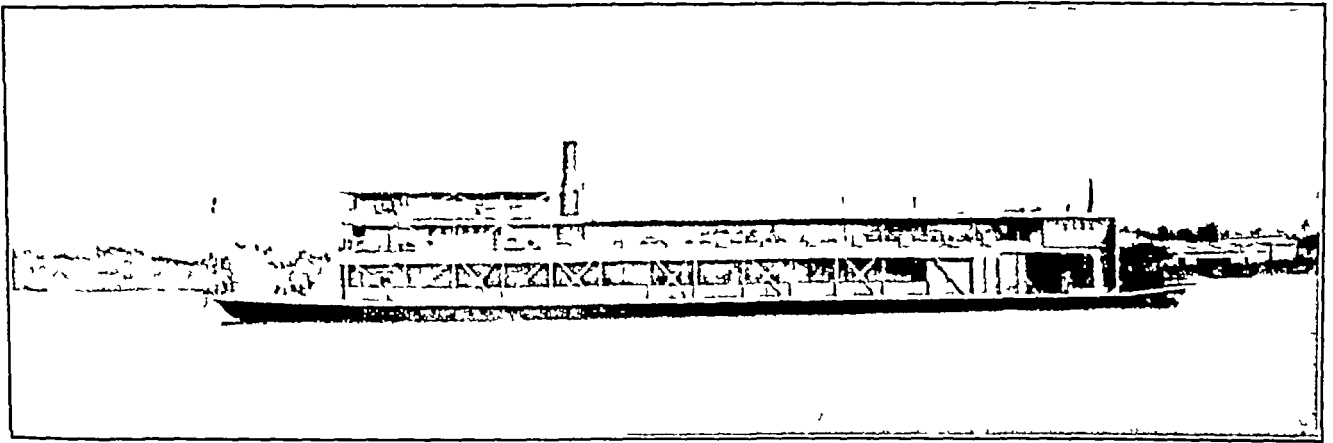
Prior to 1860 the steamer company had confined its operations to the Ganges, but by that date the railway had been advanced to Patna, running parallel to the river, tapping the principal marts of trade. Competition was so keen as to compel the steamer company to look elsewhere for an outlet for its energy. The province of Assam was by this period coming into prominence on account of the nascent tea industry, and the India General Steam Navigation Co undertook, with considerable misgivings, to send one steamer every six weeks to Assam as an experiment. That province was at that time being developed for tea

cultivation, and the steamer service was so successful that by 1862 the six-weekly service was changed into a four-weekly one. In 1863 the district of Cachar, included in the province of Assam, but watered by an entirely different river system, was invaded by steam. From this time forward the Ganges trade slowly declined, and Assam and Cachar absorbed more and more of the attention of the company. The East Indian Railway Co. had advanced to Allahabad about 1864, but it was not until 1874 that the steamer company finally abandoned its original territory and closed its Ganges service.

Although the fleet of the company had increased

1899 it was considered expedient to transfer the headquarters of the company to London, the name being altered at the same time to that of the India General Navigation and Railway Co., Ltd. The registered offices are in Orient House, New Broad Street, E.C. The history of the company since that date has been one of steady progress, and its fleet now comprises 600 vessels, including 120 towing and passenger steamers and 155 cargo flats, aggregating 130,000 tons carrying capacity, the largest unit being of 1,200 tons.

As already indicated the company started with a capital of 20 lakhs of rupees, or £20,000, as the rupee then stood at the par value of two shillings,



STERN WHEELER "VENUS," GANGES SERVICE, INDIAN GENERAL NAVIGATION and RAILWAY CO., LTD

to 16 steamers and 34 flats by the year 1876, the carriage of jute from the districts of Eastern Bengal commenced to engage serious attention, and between 1870 and 1880 considerable additions were made to the fleet to meet the demands of a rapidly expanding trade. In 1882 the company took over the transport of goods previously carried by the Eastern Bengal State Railway flotilla, and in the same year a sea-going steamer service was opened to the coast ports of Orissa. The record of the company was not one of unchallenged prosperity, as at various times rival concerns were started, flourished for a season like the proverbial green bay tree, were bought up or amalgamated with, or succumbed to the energies of, the older company.

In 1889 the India General Steam Navigation Co. entered into an arrangement with the Rivers Steam Navigation Co., by which the work of passenger and goods transport was equally divided, each company remaining a distinct entity.

In 1890 the fleet consisted of 66 steamers and 72 flats — a marked increase on the previous decade. In 1896 the India General Steam Navigation Co. obtained sanction to construct a railway connecting Mymensingh with the Brahmaputra River, and in

and the original shares were of the value of Rs 1,000, or £100 each. From time to time the company's property increased in value. The capital was augmented, and now is £1,000,000, of which £735,710 is issued.

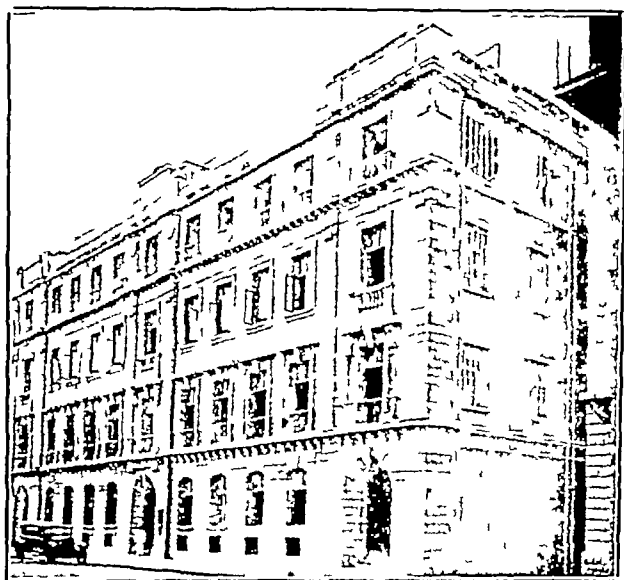
During the early years of the company the management was vested in a secretary, acting under a board of directors. In 1873 Messrs Schoene, Kilburn and Co. became managing agents in conjunction with the directors, and although the title of that firm was altered to Kilburn and Co., in 1889, this in no way disturbed their position.

No survey of the company's field of operations would be complete without reference to the Sunderbunds, that marvellous network of rivers lying between the combined main streams of the Ganges, the Brahmaputra, and the Hooghly. The greater portion of the company's fleet traverses this labyrinth in their journeys between Calcutta, East Bengal, Assam, and the United Provinces, as far as Buxar. A large part of the Sunderbunds is dense jungle, the home of the tiger and deer, but it is slowly being brought under cultivation. Its intricate navigation may be appreciated by the fact that between Calcutta and Chandpur 52 distinct rivers are traversed in a distance of 450 miles.

HOARE, MILLER and CO , LTD , Merchants and Agents, 5, Fairlie Place

THE business of Messrs Hoare, Miller and Co , Ltd , is one of those large concerns which do not lend themselves to any descriptive writing , but the influence it exerts in local commerce is very much greater than that of less important undertakings to which many pages of interesting matter could be devoted . It was established about seventy years ago, and has extensive connections throughout the world, as well as in all parts of India . Messrs Hoare, Miller and Co , Ltd , are large importers of cotton piece-goods, and the infinity of merchandise sustaining the general bazar trade . They are

other directors are Messrs C C Miller and J B Lurnbill . There is a branch of the business at Bombay , and the London correspondents are Messrs Hoare, Miller and Co , Pinner's Hall, Austin Friars, E C . The telegraphic address of Messrs Hoare, Miller, and Co , Ltd , is " Hoar miller," and they use all the standard codes . They are managing agents of the Calcutta Steam Navigation Co , Ltd , whose cargo and passenger steamers are so familiar on the Hooghly . They are also managing agents of the Mayurbhanj Railway Co , Ltd , and Signell Tea Co , Ltd , secretaries of



CALCUTTA



BOMBAY

PREMISES OF HOARE, MILLER and CO , LTD

likewise exporters of jute and tea, and contribute a good deal to the shipping activity of Calcutta as steamship, landing and forwarding agents

In 1914 the firm removed from their original premises at 38, Strand Road, into the large and handsome offices which they now occupy at 5, Fairlie Place . In 1924 the present company was formed . The Chairman Mr J F Barton, is a member of the Bengal Legislative Council . The

Cammell Laird and Co (India), Ltd , and agents for

Harrison Line of Steamers
Blue Funnel Line
North British Locomotive Co , Ltd , Glasgow
Associated Lead Manufacturers Export Co , Ltd
Newcastle-on Tyne
Wm Briggs & Son, Ltd , Dundee
Howell & Co , Ltd , London
Globe Pneumatic Engineering Co , Ltd , London
John Navler & Son, Ltd , Dudley

**BRUNNER, MOND and CO (INDIA), LTD , Manufacturers of Chemicals,
2, Old Court House Corner**

MESSRS BRUNNER, MOND and Co (INDIA), LTD , were formed in 1923 in order to take over the business of Brunner, Mond and Co , Ltd , in India, Burma, and Ceylon, where the latter company had traded for many years through branches established at Calcutta and elsewhere

When the great chemical combine of Imperial Chemical Industries was formed in England by the fusion of Messrs Brunner, Mond and Co , Ltd , Nobel Industries, Ltd , British Dye-Stuffs Corporation, Ltd , and the United Alkali Co , Ltd , Messrs Brunner, Mond and Co (India) Ltd , as a subsidiary company of this great con-

cern, became the sole distributors in India, Burma, and Ceylon of the chemical products of Imperial Chemical Industries, Ltd . These products, which are manufactured in a large number of works in the United Kingdom, and exported to all parts of the world, include soda ash and other alkalies, sulphate of ammonia and other fertilisers, and the extensive range of dyes manufactured by the British Dye-Stuffs Corporation

As Imperial Chemical Industries include among their subsidiaries Synthetic Ammonia and Nitrates Ltd , they are deeply interested in the extension throughout India of the use of chemical manures

Messrs Brunner, Mond and Co (India), Ltd, are, in addition to the foregoing, representatives in India of

The Castner Kellner Alkali Co Ltd

Chimce & Hunt Ltd

The Magadi Soda Co Ltd

The Cassel Cyanide Co Ltd

And are also Selling Agents for

H C Fenne & Co Ltd

British Glues & Chemicals, Ltd

The Standard Anhydrous Ammonia Co Ltd

Joseph Crosfield & Sons Ltd

The Mond Staffordshire Refining Co Ltd

Van den Beighs, Ltd

Messrs Brunner, Mond and Co (India), Ltd, have facilities for stocking and distributing their merchandise at all the important centres and markets of the Indian Empire. Their head office is at 2, Old Court House Corner. Their telegraphic address there is "Alkali," and the codes used are the Western Union, Bentley's, A B C 5th edition, and Schofield's. They have branches at Bombay, Cook's Building, Hornby Road, Madras, 19-20, Armenian Street, Karachi, Katrak Terrace, Machi Miani, Rangoon, 73, Merchant Street, Colombo, Messrs Havley and Kenny, agents, P O Box 70

BALMER, LAWRIE and CO, LTD, Merchants, Bankers, General Agents and Engineers, 103, Chive Street

CALCUTTA has much to justify its proud boast of being the second city in the Empire, and the number and character of its firms, for instance, eloquently demonstrate the important position it occupies amongst the world's principal commercial and industrial centres. In and around the Chive Street district are offices of great concerns with world-wide connections, and prominent amongst them are Messrs Balmer Lawrie and Co, Ltd. The fact that in their offices no fewer than 350 Indian clerks are employed, in addition to 40 Europeans, is in itself an impressive indication of the extent of this well-known firm's activities. These offices are the firm's headquarters, but they have also a branch at 5, Graham Road, Ballard Estate, Bombay, which enables them to reach all the provinces of India.

In the old days of Eastern trade many of the large mercantile houses operated as bankers, and Messrs Balmer, Lawrie and Co, Ltd, are one of the few of that character still left whose financial resources are utilised for the convenience and advantage of their numerous customers.

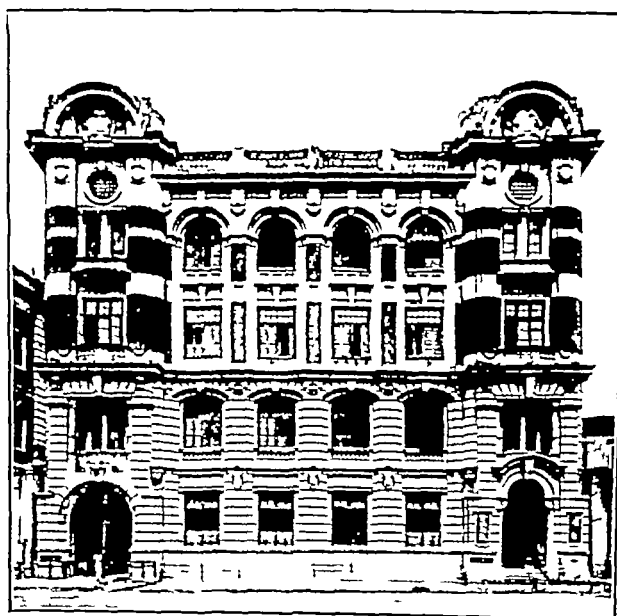
They are also very large importers of metal, machinery, and electrical plant. Their extensive operations in structural steel work and the resultant development of that department of the business led to its incorporation in 1920 as a separate undertaking under the name of the Bridge and Roof Co (India), Ltd, for which Messrs Balmer Lawrie and Co, Ltd, act as managing agents. That company occupies in Howrah an area of about nine acres, devoted solely to constructional engineering.

Messrs Balmer, Lawrie and Co, Ltd, are also managing agents of the Bengal Flour Mills Co, Ltd, formed in 1894, whose mills in Howrah are the largest of their kind in India, their manufacturing capacity being 50 sacks of flour per hour.

They are likewise managing agents of the Bengal Paper Mills Co, Ltd, formed in 1886, whose mills at Ranigunge are the second largest in India, and have a productive capacity of 750 tons of paper per month.

Messrs Balmer, Lawrie and Co Ltd, have done electrical work on a large scale throughout

India, and carried through successfully many important installations. That department of their business also became so extensive that its constructional side was formed, in 1920, into a limited liability company under the style of the British India Electric Construction Co, Ltd,



OFFICE BUILDING OF
BALMER, LAWRIE and CO, LTD, CALCUTTA

with works in Budge-Budge Road, Kidderpore, employing hundreds of persons in the manufacture of power and lighting equipments of every kind.

For many years Messrs Balmer, Lawrie and Co, Ltd, carried on the manufacture of ice, in which several other firms in India were also engaged. In 1903 these ice-making interests were amalgamated as the Calcutta Ice Association Co, Ltd, which is now turning out 140 tons of ice daily, and its managing agents are Messrs Balmer, Lawrie and Co, Ltd.

The business of Messrs Balmer, Lawrie and Co, Ltd, was established in 1867 by Mr S G Balmer, who died soon afterwards, and Mr

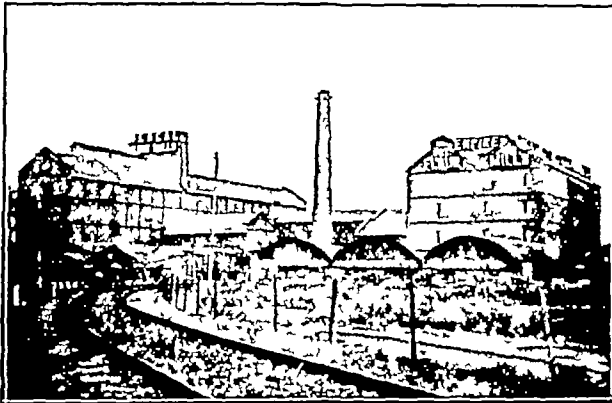
Alexander Lawrie, under whose capable and enterprising direction it developed into one of the noteworthy undertakings in the city. Mr Lawrie died in 1912, and the firm was formed into a limited liability company in 1924. The managing director is Sir Hubert W. Carr, who, after some years of tea planting in Assam, joined the firm in 1900, and became senior resident partner in 1917.

Messrs Balmer, Lawrie and Co, Ltd, are Managing Agents of—

British India Electric Construction Co, Ltd
Arthur Butler & Co (Mozufferpore), Ltd
Clive Street Central Property, Ltd
Empire Flour Mills Co, Ltd
New Beerbhoom Coal Co, Ltd
New Kendah Coal Co, Ltd
Anglo-Indian Carrying Co
Indian Galvanizing Co (1926), Ltd
Bengal Paper Mill Co, Ltd
Bengal Flour Mill Co, Ltd
Calcutta Ice Association, Ltd

Messrs Balmer, Lawrie and Co, Ltd, are amongst the largest shippers of Indian tea, and are agents for—

Jokai (Assam) Tea Co, Ltd
Jhanzie Tea Association Ltd



BENGAL FLOUR MILLS and
EMPIRE FLOUR MILLS, HOWRAH

Bahmaia Tea Estate
Makum Assam Tea Co, Ltd
British Indian Tea Co, Ltd
Dejoo Tea Co, Ltd
Lehong Tea Co, Ltd
Darjeeling Consolidated Tea Co, Ltd
Risheehat Tea Co, Ltd
Dr D. O'Brien's Tea Co, Ltd
Namdang Tea Co, Ltd
Monmoy Tea Estate
Rajabatta Tea Estate
Prithumpassa Wards Estate

These tea companies occupy an area of about 29,500 acres, and the labour required to run them is in the neighbourhood of 48,328 persons.

In addition to these extensive operations there is a separate tea department known as "The Tea Purchase" under the direct supervision of expert tasters. Here orders are executed to all parts of the world. The Canadian and United States mar-

kets receive special attention, and have been visited more or less annually for the past 35 years by the expert in charge. This tour usually takes six months during the slack season. The distance covered is about 35,000 miles, and the United Kingdom is visited en route, Australia and other markets are also called upon from time to time.

It is interesting to note that most of the original American and Canadian tea organisations which first did business with Messrs Balmer, Lawrie and Co, Ltd, are still ordering their requirements from them, a fact eloquent of the high esteem in which the firm are held in different parts of the world.

Messrs Balmer, Lawrie and Co, Ltd, also represent—

Fine Art & General Insurance Co, Ltd
The Sun Fire Office
Liverpool & London & Globe Insurance Co, Ltd
Phoenix Assurance Co, Ltd
Alliance Assurance Co, Ltd
Union Insurance Society of Canton, Ltd
Robey & Co, Ltd, Engines & Boilers
Hadfield's Steel Foundry & Equipment Co, Ltd,
Colliery Equipment
Pulsometer Engineering Co, Ltd, Steam Pumps
Hashim Foundry & Engineering Co, Ltd, Refrigerating Machines
British Belting & Asbestos, Ltd
Houseman & Thompson, Ltd, Boiler Composition
International Channelling Machine Co, Ltd, "Siskol"
Coal Cutters and Rock Drills
Kay & Wilkinson, Ltd, Leather Belting
R. A. Lister & Co, Small Oil Engines & Combined Pumping Sets
Merryweather & Sons, Ltd, Fine Appliances
American Pulley Co
United Flexible Metallic Tubing Co, Ltd
A. G. Mumford, Ltd, Donkey Pumps
Moore's Patent Tea Sorters
Peter Spence & Sons, Ltd, Aluminoferic & Sulphate of Alumina
F. Braby Corrugated Iron Co, Ltd
Burnell & Co
John Summers, Ltd
Frodingham Iron & Steel Co, Ltd
Lanarkshire Steel Co, Ltd
Frost Steel & Wire Co, Ltd, Woven Wire Fencing
Betts & Co, Ltd, Tea Lead
Hoyt Metal Co of Great Britain, Babbit Metals
R. Hood, Haggie & Son, Ltd, Wire Ropes
Katra Cement & Industrial Co, Ltd
Jubbulpore Portland Cement Co, Ltd
"Gillingham" Portland Cement
Edison Swan Electric Co, Ltd, Lamps
Robbins & Meyers, Ltd, Fans
Tudor Accumulator Co, Ltd
Johnson & Phillips, Ltd, Transformers, Electric Wires and Cables
Cables Accessories Co, Ltd, Switchgear, Fittings, Fans and Heating Apparatus
Nalder Bros & Thompson, Ltd, Electrical Instruments
"Ceag" Miners Supply Co, Ltd, Miners' Lamps
Waygood Otis, Ltd, Lifts
Electric Construction Co, Ltd, Electric Plants
Morgan Crucible Co, Moissanite Carbon Blocks
Gaskell & Grocott, Insulators
Mavor & Coulson, Ltd, Coal Cutters
Lester Bruston, Automatic Lighting Sets

The firm's telegraphic address is "Balmer," Calcutta, and they use all the standard codes.

**RUSSA ENGINEERING WORKS, LTD., Electrical, Mechanical and Automobile Engineers,
110-1, Russa Road**

THE RUSSA ENGINEERING WORKS, LTD., was incorporated in 1906 to meet the then great need of an engineering establishment specially equipped for the repair and maintenance of motor vehicles and for the manufacture of accurately machined parts, jute-mill spares, high-class engineering, and electrical work of every description. The venture proved very successful, and the company were appointed some years later sole distributors of the Ford products for Bengal, Assam, Bihar and Orissa, and the United Provinces.

Almost on the outbreak of the Great War the company's aid was sought by Government in connection with munitions of war, and in that connection rendered great service in the production of machine guns and gun parts of all kinds, and also in the manufacture of automatic coinage weighing balances for His Majesty's Mint.

After the Armistice the company, in order to be able to cope, by the most modern methods and

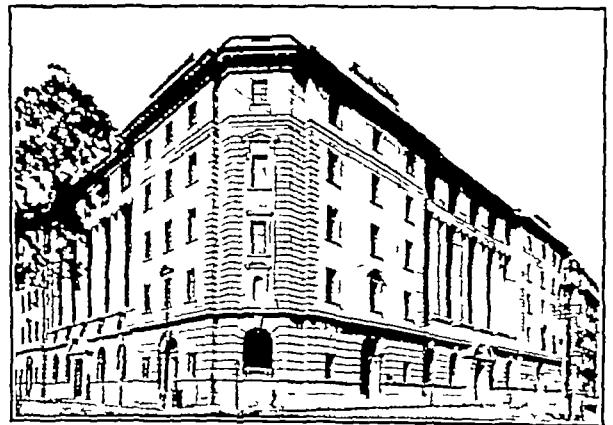
on the largest scale, with the phenomenal demand that sprang up in Calcutta as elsewhere for motor service and supplies, made very extensive additions and improvements to their premises, with the result that their establishment in Russa Road, which occupies an area of about four acres, is one of the most noteworthy of its kind in India. They have also excellent showrooms in Chowringhee, a garage at 3, Mission Row, and branches at Dibrugarh and Jorhat. The business in Calcutta gives employment to about 2,000 persons, and all the departments are under the supervision of European experts. The general manager is Mr W. E. A. Morby, A.M.I.E.E., who has been connected with the concern since its inception, and was previously in the electrical department of its managing agents, Messrs Kilburn and Co., that department being the nucleus from which the business developed.

MACKINNON, MACKENZIE and CO., Steamship and Insurance Agents, British India Steam Navigation Co., Ltd., Strand Road

MESSRS MACKINNON, MACKENZIE and Co.'s business was started in a comparatively small way in the early part of the nineteenth century as a general merchandise concern at Calcutta by two young Scotsmen, whose names form the firm's designation. In 1856 they secured from the East India Co. the contract for carrying the mails between India and Burma, and for that purpose formed the Calcutta and Burma Steam Navigation Co., which was commenced with two vessels, the *Baltic* and the *Cape of Good Hope*. A fortnightly mail and passenger service was established, but it was interrupted in the following year by the outbreak of the Indian Mutiny, when, the two vessels having been chartered as transports, the company rendered its first special service to the Government by bringing up from Ceylon to Calcutta half of the old 35th Regiment—the first reinforcement of European troops to reach India from the outside world.

Improved trade with Burma soon induced an enlargement of the company's resources in tonnage, and Mr Mackinnon returned to Calcutta after a visit to England where he had been successful in raising further capital with a view to renewing the first contracts, and inaugurated a general system of steam communication over the whole of the Indian littoral, with extensions to the Persian Gulf on the one hand, and on the other to the Straits of Malacca and Singapore. The successful accomplishment of that scheme led to such a development of The Calcutta and Burma Steam Navigation Co.'s business that it was converted into a new company under the name of the British India Steam Navigation Co., Ltd., which has to-day a fleet of 127 vessels total-

ling 756,413 gross tons, and of these seventy-one are passenger vessels of the highest class and appointments.



OFFICE BUILDING OF
MACKINNON, MACKENZIE and CO.,
CALCUTTA.

The British India Co.'s present trade itinerary may be said to have been built up during the first three decades of its existence, save that the respective lines have since linked up new ports as occasion required, and that the demands on the different lines for additional ships of larger tonnage have always been met or anticipated. Its activities embrace to-day all the considerable ports of the tropics, lying between the parallels of Suez and Singapore, besides the principal ports of Siam, Java, China, Japan, and Australia, and it may be claimed that no single shipping corporation in the world engages in public services more varied.

The chairman and managing director of the British India Steam Navigation Co, Ltd, is the Right Honourable Viscount Inchcape, GCSI, GCMG, KCIE, who is also chairman of the P and O Steam Navigation Co.

After the fusion in 1914 of the P and O and B I Companies, and the later amalgamation of other now associated lines, Messrs Mackinnon, Mackenzie and Co, for the purpose of economy and enhanced efficiency of service, took over throughout the Orient the agencies of all these companies and combined them under one management. The wisdom of that step has been justified by results.

In addition to being managing agents of the B I S N Co, Ltd, Messrs Mackinnon, Mackenzie and Co are also managing agents of the Eastern Coal Co, Ltd, The Maduro Co, Ltd, Coromandel Co, Ltd, India Jute Co, Ltd, The Megna Mills Co, Ltd, and the British Arc Welding Co (India), Ltd, and

agents for the P and O S N Co, James Nourse, Ltd, Union Steamship Co of New Zealand, Ltd, Canadian Government Merchant Marine, Ltd, Canadian Pacific Steamships, Ltd, Atlas Assurance Co, Ltd, the London and Lancashire Insurance Co, Ltd, British and Foreign Marine Insurance Co, Ltd, Marine and General Mutual Life Assurance Society, Marine Insurance Co, Ltd, and the Salomon Tea Co, Ltd.

The firm's magnificent office building, shown by the accompanying illustration, was completed at the beginning of 1927. It covers an area of over an acre and a quarter, and has a floor area of 238,700 square feet.

The Strand Road and Fairlie Place façades, 250 feet and 260 feet respectively, are carried out in stone and have been designed in a free Renaissance style. The building, which forms one of the principal architectural features of Calcutta, is marble-floored throughout, and has a large central dome on the first floor level.

MACKINTOSH BURN, LTD, Architects, Surveyors, Builders and Contractors, Sanitary Engineers, etc, 8, Esplanade East

The influences of buildings radiate in innumerable ways other than those of ordinary recognition. Some day, doubtless, there will be published a volume on the remarkable shaping of individual and national destinies by architectural psycho-

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OFFICE BUILDING OF
MACKINTOSH BURN, LTD

metry and the part it plays in the unsuspected and undiscovered realms of psychology that vibrates in the great subconsciousness of everyday routine. In no city in the Orient has there been a greater metamorphosis in buildings during the last few decades than in Calcutta, and a firm that has done, and is doing, very much in that con-

nection is that of Messrs Mackintosh Burn, Ltd, who have been established there since 1834, in the reign of William IV. Calcutta at that time was a ramshackle place, and its buildings, with few exceptions, were makeshift structures that were taken toll of by cyclones and monsoons. But the Scottish founder, Mr James Mackintosh, and his later countrymen partners soon began to make their influence felt, an influence that has continued unabatedly to extend and permeate all phases of wonderful, modern Calcutta, with its magnificent buildings testifying eloquently to the enterprise and ability inseparable from the firm in question.

Messrs Mackintosh Burn, Ltd, used to have their workshops in Bentinck Street, but as these became too small for their requirements, they removed a few years ago to Ballygunge, and their establishment there, occupying an area of about four acres, is one of the largest and best equipped undertakings of its kind in India, providing unsurpassed facilities and resources in general mechanical engineering and wood working for the fulfilment of the largest contracts in the swiftest and most skilful manner. The business is exceptionally complete and comprehensive in every detail, from the drawing out of sketch plans of a building to the finishing coat of paint. They have also their own inland and river brickfields, special care being taken in the manufacture of their bricks to enable them to claim that no better bricks are obtainable in Calcutta. They are specialists in reinforced concrete, and are experts in all work pertaining to marble, terazzo, and tiles. Amongst the notable local buildings planned or built by Messrs Mackintosh Burn, Ltd, are their handsome head office building at 8, Esplanade, The Imperial Bank of

India, The National Bank of India, The Central Telephone Exchange, Hare Street, and branches at Central Avenue, Alipore, and finally, the Calcutta Electric Supply Power Stations at Cossipore and Garden Reach, premises for Duncan Bros and The North British and Mercantile Insurance Co, Chive Street, Kilburn and Co and East India Railway Co, Laurie Place, Thacker, Spink and Co, Esplanade, W. Leslie and Co, Chowringhee, Hall and Anderson, Ltd, Park Street and Chowringhee, Stephen's Court, Park Street, McLeod House, Dalhousie Square, Club House of The Royal Calcutta Golf Club, Tollygunge, Lascar Memorial, Portland Park Housing Scheme for the Calcutta Port Commissioners, Housing Schemes, Moore Avenue, Flgin Road, etc, etc

As sanitary engineers Messrs Mackintosh Burn, Ltd, operate on the same up-to-date lines characteristic of their many other departments,

and are septic tank specialists. Needless to say, their great stocks of materials include everything that can be suggested for the enhancement of the work done.

An idea of the huge character of the business will be obtained by mention of the fact that it gives employment in Calcutta to about 10,000 persons, including a large number of European engineers and experts in the many departments of skilled industry in which the firm engage with such manifest success. Their influence and activities, however, are not confined to Calcutta, but extend throughout India and Burma, and amongst the fine buildings erected by the firm in the latter country is the Imperial Bank of India, Rangoon.

The telegraphic address of Messrs Mackintosh Burn, Ltd, is "Buildane," Calcutta, and the codes used by them are the A B C 5th and 6th editions, Bentley's, and private.

LIPTON, LTD, Tea and General Provision Merchants, 9, Weston Street

AMONGST the best known of the world's commodities which can be counted on the fingers is Lipton's tea, so famous everywhere that it seems impossible for the time ever to come when people will not call for it in the grocery shops of civilisation and the nondescript little stores in jungle lands and back blocks. Other great tea concerns have come into prominence during recent years, but Sir Thomas Lipton, the founder of the world-wide company bearing his name, was the pioneer of the modern tea trade as understood by the masses in every city in every land. "Lipton's Tea" is a famous slogan throughout all the bazaars of India, as well as in the stores where the discriminating upper classes of India's teeming millions obtain their commissariat supplies. The name is everywhere in Calcutta, but the factory in that city forming the company's headquarters in India is hidden away by the buildings surrounding it in Weston Street, a little thoroughfare running from Bentinck Street, which latter used to be the chief shopping artery of Calcutta.

The impression which will doubtless remain most vividly in the memory of the visitor to Lipton's factory in Calcutta is its odour—the delightful rich fragrance of tea from the finest gardens of Northern India, which supplies two-fifths of the world's production of tea. The consumer of Lipton's tea knows full well its refreshing quality and aroma, but doubtless is unaware of the wonderful knowledge, care and skill exercised in maintaining the high quality and distinctive individuality of each of the company's famous blends, particularly "Darjeeling," "Yellow Label," and "Red Label." In that connection lies the secret of the great popularity of the Lipton teas, and to describe adequately the interesting processes by which the blending is carried on in the company's factory in Weston Street is

unfortunately impossible within the limits of space at our disposal. As many as 30 to 40 teas from different plantations contribute to the making up of one blend. Each separate garden produces tea of different characteristics. No two gardens produce tea exactly similar in flavour, strength, and keeping qualities. The crops from each individual garden also vary continually. One object of blending is to neutralise these variations and by its skilful use to produce blends of tea which do not differ, to any appreciable extent, even in the course of a year. The other object is to combine the various teas so as to produce the best possible result. When the composition of a blend has been decided upon the teas relating to it undergo an elaborate machinery process, and from the time the leaves are plucked until the finished product reaches the consumer the tea is untouched by hand, every precaution being taken to ensure its perfect purity.

The entire machinery equipment of the factory is an impressive demonstration of scientific and mechanical ingenuity for the maximum attainment at the minimum expenditure of time and labour, and the consequent reduced cost of operation has its natural result in the reduction of the price of Lipton's tea to the lowest possible margin.

The round and square tins for quantities of 1-lb, $\frac{1}{2}$ -lb and $\frac{1}{4}$ -lb respectively, in which the teas are despatched throughout India and Burma, are made on the premises. The prepared tea is deposited in these tins by really remarkable electrical contrivances that weigh each quantity automatically. When the tins are filled and hermetically closed they are placed on a long revolving band which carries them to the department where the famous labels are put on them by other machinery operating with almost uncanny precision and capacity.

A large trade is also transacted by Messrs Lipton, Ltd, throughout India in dust tea, which is very popular because of its greater economy and rapidity of infusion than the leaf tea

The two floors where the tea chests are kept before being despatched throughout the country have accommodation for 25,000 chests

Messrs Lipton, Ltd, have been established at Calcutta since 1897, prior to which they had transacted a large trade in India through local agents. Their first premises were in Dalhousie Square, which soon became inadequate for their requirements, and in 1908 they acquired a godown in Weston Street which six years later was greatly enlarged and transformed into the present factory and head office now giving employment to about 500 persons. Messrs Lipton, Ltd, have branches at Bombay, Ahmedabad, Delhi, Madras, and Karachi, and agents throughout India and Burma

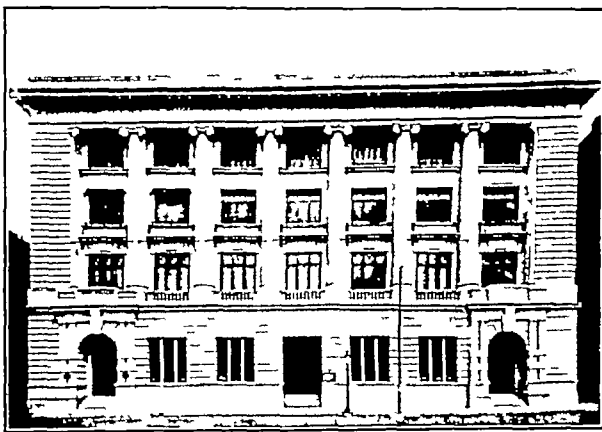
Their telegraphic address is "Lipton," and their codes are the A B C 6th edition, Western Union, Bentley's, Calpack, and private

Messrs Lipton, Ltd, also transact a large wholesale trade in general provisions and coffee, and are agents in India and Burma for the following concerns —

The Californian Packing Corporation, San Francisco,
Del Monte Products
Worthington & Co, Ltd, London, Bottled Beer
C Diessler, Bremen, Ring Brand Beer
The Combined Brandy Shippers, Ltd, Cognac, Double
Bell Brandy
The London Distillery Co, Ltd, London, Old Tom
and Dry Gin
J P O'Brien & Co, Liverpool, Guinness Stout
Wilts United Dairies, Ltd, London, Condensed Milk
Wright, Laymen & Umney, Ltd, London, Coal Tar
Soap
Mason & Co, Ltd, London, Sauces
The Shredded Wheat Co, Ltd, Hertfordshire,
Shredded Wheat

McLEOD and CO, Merchants and Agents, McLeod House, 28, Dalhousie Square

McLEOD HOUSE is the headquarters and freehold property of Messrs McLeod and Co, for whom it was constructed in 1917. The land on which it stands was formerly the site of the Mercantile Bank, and the firm moved into the building from their previous premises at 31, Dalhousie Square



McLEOD HOUSE,
OFFICE BUILDING OF McLEOD and CO

Constructed after the Doric style of architecture, McLeod House is faced with massive Ionic columns, and each of its four storeys has a floor space of approximately 11,000 square feet. The internal appointments are in keeping with the general magnificence of the building, and the clerical departments, with their large Indian staffs, supervised by many Europeans, are indicative of the firm's prominence in local commerce and industry

The business of Messrs McLeod and Co was founded in 1889 by Mr C C McLeod—now Sir Charles McLeod, Bart—in partnership with Mr A Campbell, in Mangoe Lane, on the opposite side of Dalhousie Square, towards which McLeod

House now looks as a dignified and concrete example of great achievement since the name of McLeod and Co was put up with hopeful aspiration on the unpretentious little premises in the lane in question, so named because of the abundance of mangoe trees that used to grow there

The extent to which the firm's activities have grown may be indicated by the fact that besides their comprehensive trade as general merchants and commission agents, they control five jute mills, two collieries, forty tea estates, five railways, three industrial companies, and two zemindary companies. The jute mills are Kelvin and Empire, on the east bank of the river at Tittaghur, Soorah, on a canal at Narculdanga, Presidency, on the river at Rishra, and Chittavalsah, in the north of the Madras Presidency, taken a few years ago from the South India Industrials, Ltd

The tea companies and gardens controlled or represented by Messrs McLeod and Co are found in almost every tea garden district in Northern India, the Dooars, Terai, Assam, Cachar, and Sylhet. The chief one is the Imperial Tea Co, Ltd, with 12,986 acres under tea, out of a grant of 41,262 acres, a capital of £553,600, and an average annual outturn of 6,012,854 lbs black tea. Its divisions number eleven, of which seven are situated in the Dooars, and it gives employment to 15,516 persons

The tea companies of which Messrs McLeod and Co are managing agents are Bhatkawa Tea Co, Ltd, Rajahbhat Tea Co, Ltd, Rutem Tea Co, Ltd, Atal Tea Co, Ltd, and Telojan Tea Co, Ltd, representing a total area of grants, 9,417 acres, and a total area under tea of 4,236 acres

The companies for which the firm are agents, representing a total area of grants 89,022 acres, and a total area under tea of 30,098 acres, are 15

follows Imperial Tea Co., Ltd., British Assam Tea Co., Ltd., Halem Tea Co., Ltd., Dooloo-gram Tea Co., Ltd., Gingia Tea Co., Ltd., East India and Ceylon Tea Co., Ltd., Empire of India and Ceylon Tea Co., Ltd., Bormah Jan Tea Co., Ltd., Nilpur Tea Co., Ltd., National Tea Co., Ltd., and the Sai Kowah Tea Co., Ltd.

As agents for the Tingamira Tea Seed Co., Ltd., Messrs McLeod and Co. are responsible for the disposal of approximately 1,600 maunds of tea seed each year of the following well-known types "Tingamira Assam," "Tingamira Manipuri," "Goupini Assam," "Kutchu Manipuri." Most of the crop is sold in Northern and Southern India, but a considerable quantity is also exported to Java, Sumatra, and Kenya Colony.

In the highly competitive trade of tea boxes the firm represent Luralda, Ltd., in India. Large stocks are carried by them in Calcutta to meet urgent orders, and an average annual sale of approximately 150,000 complete chests has been reached during recent years.

TRIANGLE LEAD MILLS CO., LTD., a private company, was formed in 1926, and is managed by Messrs McLeod and Co. Devoted to the production of lead foil for tea box linings and other uses, its works are situated in Kidderpore, and all the lead-rolling machinery is electrically driven.

Messrs McLeod and Co. control as managing agents the Gopalchuck Coal Co., Ltd., in the Manbhoom district, the output of which has been sold forward by private contract for a considerable period, and under normal conditions none of the coal comes on the public market.

Messrs McLeod and Co. deal with the administration and operation of five light railway companies, as well as undertake surveys and reports. These five companies represent a capital of Rs. 11,000,000, all of which has been subscribed in India. They carry an average of 2,100,000 passengers per annum, with a train mileage of 420,000 miles.

The firm are also managing agents of the Tezpur Balipara Tramway Co., Ltd., in Assam, which was formed in 1893 for the benefit of the tea concerns in the Tezpur district of Darrang. That company acts as a link between the gardens on the north bank of the river and the steamer station at Tezpur.

BRITANNIA ENGINEERING CO., LTD., commenced its activities under the management of Messrs McLeod and Co. in 1917, its objects being to specialise in the production of spare parts for jute-mill machinery. This object was soon attained, and the company then turned its attention to the production of cotton and tea machi-

nery. Its works, covering an area of six acres of land, alongside the main line of the Eastern Bengal Railway, near Tittaghar, include a smiths' shop, containing a full equipment of drop stamps and the usual plant and appliances for the manufacture of material for railways. In the foundry there is ample capacity for the production of iron castings up to ten tons in weight, and particularly castings suitable for mass production. The machine shop is equipped with the latest type of machine tools and is capable of handling every description of high-class work, specialising in the gear cutting of spur, bevel, worm, single and double helical wheels and milling machine work. In the forge and smiths' shop is undertaken the manufacture of couplings, buffers, spindles, hooks, draw bars, axle guards, keys and waggon locks used on the several railways in India.

One of the many interesting and important features of the works is the manufacture of complete machines, such as looms, softners, cop winders, etc., for jute mills and patent tea-rolling machines for tea gardens. A full range of tea machinery designed and manufactured at the works has also been placed on the market.

Messrs McLeod and Co. operate largely in the export of jute to various countries, principally to Europe and America. They are also large importers and exporters of material for all departments of the many undertakings which they control, including the Solano Estates, which are situated in the neighbourhood of Gaya, Shahabad and Patna. These estates have an interesting record, dating back to 1820, when one Joaquim Solano came to India as a surgeon in the Spanish Navy. After several years' successful trading in India and China he was able to buy a factory in Bengal with the profits, and since then the property has passed from man to man and has developed considerably.

The telegraphic addresses of Messrs McLeod and Co. are "Kelvin," "Dimples," and "Outline," and they use all the standard codes, as well as private.

Amongst the other agencies held by the firm are

- Dollar Line
- Admiral Line
- Davey, Paxman & Co., Ltd., Steam Engines and Boilers, Oil Engines, etc.
- Brunton's, Manufacturers of Mild Steel Shafting and Machinery Rod
- Hick, Hargreaves & Co., Ltd., Turbines and Engines of all descriptions
- Bucyrus & Co., Manufacturers of all Machinery for Excavating, Dredging Mining etc.
- Dobson & Barlow, Ltd., Makers of Textile (Cotton) Machinery of all kinds
- The Lalserah Indigo Concern
- The Irrawaddy Flotilla Co.
- The Ryghat & Farrowah Estates, Ltd.

MACNEILL and CO , Merchants and Agents, 2, Fairlie Place

It is a very noteworthy fact that the great commercial and industrial development of Calcutta has been contributed to very materially by Scotsmen. Most of the principal firms in the city bear Scottish names, and a very striking characteristic of this is that notwithstanding the great interests which they control they still retain the designations under which they were started, and are not limited liability companies. Scottish enterprise and ability apparently must not be regarded as in association with limitations of any kind, neither of nomenclature nor aspirations towards the acquisition of the wherewithal so absolutely indispensable in the whole fabric of the life of the world. Probably in no city in the British overseas dominions can Scotsmen cite with greater pride and justification more noteworthy achievements by their countrymen than the examples provided in that connection by Calcutta. There is something about engineering and merchandising on a big scale that seems peculiarly adapted to the Scottish mind, which, accredited with minute and constant scrutiny of the most negligible financial token, is doubtless by that very quality peculiarly and specially qualified for careful management of the vast totality into which little details can result.

Be that as it may, the business of Messrs Macneill and Co, for instance, affords an excellent example of Scottish enterprise and ability in the commerce and industry of Calcutta. It was founded in 1872 by Messrs Duncan Macneill and John Mackinnon, names that proclaim their origin beyond doubt or peradventure. Many changes have naturally occurred in the personnel of the firm through death and retirement, but in the board room in the firm's magnificent offices at 2, Fairlie Place, the interesting array of portraits of the distinguished partners who succeeded the original founders are nearly all of Scotsmen. The present partners are The Rt Hon The Viscount Inchcape of Strathnaver, G.C.S.I., G.C.M.G., K.C.I.E., Hon Kenneth Mackay, Hon Alexander Shaw, G.F. Hotblack, H.H. MacLeod and W.F. Reynolds, London, W.N.C. Grant, E.G. Abbott and J.Y. Philip, Calcutta.

The influence of Messrs Macneill and Co's activities permeates much of the business life of Northern India as well as of Calcutta. In the staple product of Eastern Bengal, jute, they are

largely interested, and are Managing Agents of the Ganges Manufacturing Co, Ltd, whose mill is equipped with 2,004 looms, half of which are for weaving heavy sacking, and the balance for lighter fabrics. They control also the work of the Ganges Rope Co, Ltd, which turns out large quantities of rope and lines of all kinds.

Messrs Macneill and Co, as agents for the Rivers Steam Navigation Co, Ltd, are doing, and have done, a very great deal in connection with inland navigation. In that connection they have a splendid fleet of steamers built specially for passenger and freight trade between Calcutta, Assam, and Cachar.

The firm are likewise very extensively engaged in the tea industry of Northern India. They are managing agents of

Baghjan Tea Co, Ltd
Bhubandhar Tea Co, Ltd
Moirghat Tea Co, Ltd
Nangdala Tea Co, Ltd
New Assam Valley Tea Co, Ltd
New Monkhooshi Tea Co, Ltd
Bukhual Tea Estates, Ltd
Dirai Tea Co, Ltd
Sonarup Tea Co, Ltd

and agents for

Terrapore Tea Co, Ltd
Scottpore Tea Co, Ltd
Greenwood Tea Co, Ltd
Doodputtee Tea Co, Ltd
Cossipore Tea Co, Ltd
Upper Assam Tea Co, Ltd
Western Cachar Tea Co, Ltd
Northern Dooars Tea Co, Ltd
Thanai Tea Co, Ltd
Koyah Tea Co, Ltd
Majagram Tea Co, Ltd
Assam Estates, Ltd
Kallam Tea Co, Ltd
Dilkooshi Tea Estate

The extensive interests of Messrs Macneill and Co may also be further indicated by their being managing agents of

Ganges Printing Co, Ltd
Equitable Coal Co, Ltd
Aldih Coal Co, Ltd
Mundulpoor Coal Co, Ltd
Nodih Coal Co, Ltd
West Jurnaria Coal Co, Ltd
Dhemo Main Collieries, Ltd
Ganges Transport & Trading Co, Ltd
Assam Railways & Trading Co, Ltd

The firm's telegraphic address is "Macneills," Calcutta, and the codes used by them are Broom hall's, A B C 5th edition, and Bentley's

RIVERS STEAM NAVIGATION CO , LTD 2, Fairlie Place

THE RIVERS STEAM NAVIGATION Co, LTD, was formed in 1862 under the name of the New River Steam Co, but was reconstructed in 1873, and converted into a limited liability company with a capital of £100,000, which has since been increased.

The fleet originally consisted of 3 steamers and 3 flats, but now comprises a total of 417 vessels, of which 121 are steamers or launches, and 166

are flats, together with 130 of a miscellaneous character, but including 20 vessels owned jointly with the India General Navigation and Railway Co, Ltd.

Messrs Macneill and Co are agents for the Rivers Steam Navigation Co, Ltd, and they have for a considerable number of years interested themselves largely in connection with the passenger and freight traffic between Calcutta and

Assam, Cachar and other places. Messrs Macneill and Co have been pioneers in reducing the cost of transfer of goods, in securing greater regularity in the time-table, and in providing better accommodation for passengers.

The waterways traversed by the vessels of the Rivers Steam Navigation Co., Ltd., extend through Bengal, Assam, United Provinces, and Behar and Orissa, and the extent of the rivers navigated is 5,163 miles. The Rivers Steam Navigation Co., Ltd., and the India General Navigation and Railway Co., Ltd., have conjointly established many fast daily services on the Brahmaputra, also between Goalundo and Narayanganj and Chandpur and in the Delta, working in connection with the Eastern Bengal and the Assam Bengal Railways systems. In addition they have special steamers and flats for conveying raw jute to the mills on the Hooghly River.

The principal dockyard of the Rivers Steam

Navigation Co., Ltd., is under the control of Messrs Macneill and Co., and is situated at Garden Reach. It has 2 dry docks, 4 slipways, 3 of which include transverse grids capable of accommodating 3 to 5 vessels at the same time. It covers 45 acres, and has a river frontage of 2,300 feet. Six building slips and extensive workshops have been recently erected and equipped with modern machinery, where constructional and repairing work of all kinds is carried on. The steamers of the P and O and B I S N Companies are dealt with at the dockyard, and some thousands of workmen are constantly employed.

Workshops—owned jointly with the India General Navigation Co., Ltd.—are established at several of the large up-country stations, and capacious warehouses for dealing with the immense traffic in merchandise are located at Juggernath-ghat, Kidderpore, Armenian Ghat, Nimtollah and other places in the neighbourhood of Calcutta.

LYONS (INDIA), LTD, 11, British Indian Street

Many of the important companies in Calcutta are subsidiaries of world renowned concerns in Great Britain. Thus it is with Messrs Lyons (India), Ltd., which was formed in 1922 for the purpose of dealing with the great tea interests of Messrs J Lyons and Co., Ltd., London, that had for many years previously been entrusted to local agents.

The premises of Messrs Lyons (India), Ltd., at 11, British Indian Street, are not impressive architecturally, but the highly skilled activities conducted there are exceedingly interesting and instructive in view of the fact that upon them depend in no small measure the remarkable aroma and general high quality of the renowned Lyons' tea.

The department where every grade of tea from the plantations of Northern India is tasted is appointed with marble counters and an elaborate system of receptacles for the numerous samples and with everything indeed that knowledge and experience can suggest for the perfection of the work therein performed. In that department the results obtained determine the blending done in the company's large premises in Hide Road, where very many people are employed.

After the various qualities of tea are blended according to the firm's fastidious formulæ, the tea is put up into packets, each weighing respectively 1lb, $\frac{1}{2}$ lb, $\frac{1}{4}$ lb, 2oz, 1oz, $\frac{1}{2}$ oz. The tea is also packed in hermetically sealed tins and these, as well as the packets, are in growing demand throughout India although it was not until November, 1926, that Lyons' tea was first placed on the retail markets there.

Of course, all the blending of the firm's famous tea is not done at Calcutta. The tea for Messrs J Lyons and Co., Ltd., London, is sent in great quantities in the lead-lined tea chests used by all shippers of tea. Much of it is received at the

London docks into the barges of Messrs J Lyons and Co., Ltd., which bring it in bond, in freights of 50 tons, via the Grand Junction Canal, to the private dock alongside the firm's great premises at Greenford. The tea goes direct to a bonded store on the premises and is there dealt with by the revenue officers until drawn out for blending and use.

Some consignments of tea and other commodities are despatched in sealed railway trucks to various points at which the firm have distributing depots, these being situated in the railway companies' goods warehouses. For many other consignments road vehicles work between London and Manchester, Liverpool, Bristol, Nottingham, Birmingham, Southampton, Portsmouth, and other large centres.

The Greenford factory covers an area of 70 acres and deals not only with tea, but also with coffee, cocoa, custard powder, toffee, chocolates, and confectionery.

Cadby Hall, the headquarters of J Lyons and Co., Ltd., at Kensington, London, covers more than ten acres of land, and extensions and new buildings are proceeding there continually. Besides the head offices, Cadby Hall is occupied by the bakeries, kitchens, and the ice-cream department.

The 10,000,000 meals supplied by Messrs Lyons to the British public every week come mainly from Cadby Hall, but there are auxiliary bakeries in Lancashire and Yorkshire, and in the West and South of England, to meet the provincial catering requirements.

There are additional factories and distributing centres in various parts of London, these include the sweet-boiling and the motor, plant, printing and stabling departments, besides factories at Greenford. There is in the city a wine cellar of 1,000,000 bottles. There are also factories for

the making of sweets at Shepherdess Walk, City Road, for shop decorations at Clerkenwell, printing works at Willesden, laundries at Camberwell, motor repairs at Park Royal, etc., etc.

Here are some illuminating figures

Total number of employees of J Lyons & Co, Ltd, nearly	30,000
Total number of meals served to the general public per week	10,000,000
Number of menus used per week all the year round	35,900
Number of packets of tea sold per day	1,000,000
Number of loaves leaving Cadby Hall bakery per hour	10,000
Number of rolls leaving Cadby Hall bakery daily	300,000

Messrs Lyons have nearly 200 tea-shops in London and suburban areas, also the Trocadero, the Popular Cafe, two Corner Houses (in Coventry Street and the Strand), and two Maison Lyons (in Oxford Street and Shaftesbury Avenue). There are two State Cafes at Liverpool and Manchester. There are also tea-shops at Brighton, Eastbourne, Birmingham, Sheffield, Leeds, Nottingham, Wolverhampton, Bristol, Bradford, and elsewhere, making nearly 40 in the provinces alone.

The permanent staff of Messrs Lyons comprises nearly 30,000 people, a figure quite without approach in any other catering organisation. This staff contains all manner of persons, professional men, craftsmen, electricians, butchers, bakers, cooks, and all the rest. Included in the list are dentists, chiropodists, and even manicurists, who are available to look after the physical comfort and well-being of the mammoth staff.

DAVENPORT and CO, LTD, Merchants and Agents, 135, Canning Street

No name has been longer connected with the tea industry of Northern India than that of Davenport. Mr J Davenport, founder of the business indicated above, was one of the first four tea buyers in Calcutta. The industry may be said to have started when the Sibsagar (Jaipur) plantations of the Government were sold in 1840 to The Assam Company, the first tea concern, which was anything but prosperous during the first fifteen years of its existence. But about 1852 it began to improve, and with that success the tea industry appeared so promising and attractive that speculators eagerly rushed into it. The discovery of the indigenous tea in Sylhet and Cachar gave the impetus for an expansion of the industry into the Surma Valley, and thereafter the whole of the upper portions of the province of Assam might be described as converted into a huge tea plantation. About this time (1853-1855) tea planting was organised in Darjeeling, and shortly after followed Chittagong, Chota Nagpur, and the Dooars, ultimately tea cultivation spread over every district in India, where there was the least hope of success.

After the temporary collapse of the industry in 1865-67 many of the estates were sold for anything they would fetch, and so were created not

Also included in the list are several hundreds of musicians, probably the last kind of profession one would expect to see on a business firm's pay list, but, as a matter of fact, Lyons, who were the pioneers in England in the provision of music in tea-shops and restaurants, spend no less than £150,000 a year on music alone.

Interwoven with all the Lyons' developments since the small commencement of the business in 1887, and making romances of themselves, are the stories of the Trocadero, the hotels, the banquets, the 8,000 guests who were catered for at Olympia for the "Daily Mail" and allied newspaper staffs at the invitation of the late Lord Northcliffe, the King's parties at Windsor, the 2,500 guests of Lord Strathcona at Aberdeen, when the company sent down everything, waiters included, from London by special train and prepared many of the dishes on the journey, the Masonic banquet at Olympia, at which 8,000 diners were present, and the wonderful record at Wembley during the first year of the British Empire Exhibition.

A whole volume could well be devoted to the great business of Messrs J Lyons and Co, Ltd, but sufficient has probably been said to indicate its enormous dimensions and the service it renders to the British public.

The Managing Director of Messrs Lyons (India), Ltd, is Mr C J Lyst, and the other directors are Messrs H H Bentley, and W I Gibson. The company's telegraphic address is the appropriate one of "Teaspoons," Calcutta, and the codes used are Bentley's and private.

a few of the large tea-agency firms in Calcutta. Amongst the earliest of them were Messrs McKnight, Anderson and Co, long since defunct, whose tea purchases were entrusted to Mr J Davenport. In 1885 that gentleman took over the business of Lloyd and Co. after it had gone into liquidation, and resuscitated it under the name of Davenport and Co, now one of the most noteworthy commercial undertakings in Calcutta. Mr John Davenport died in 1922, and in 1925 the firm was formed into a limited liability company, the directors being Mr J M Davenport, the founder's son, who has been connected with the business since 1906, Mr T A Magnus, and Mr E A Collin.

Tea has ever formed the principal commodity handled by Messrs Davenport and Co, Ltd, and they are very large shippers of it to all parts of the world, especially America, Canada, Australia, and the British Isles. They are Managing Agents of

Hsimara Tea Co, Ltd
Huldibari Tea Association, Ltd
Sonai River Tea Co, Ltd
Nuwa Chumto Tea Co, Ltd
Hopetown Tea Co, Ltd
Gulmra Tea Co, Ltd
Pussimbing Tea Co, Ltd

Tamsong Tea Co., Ltd
Belgich Tea Co., Ltd
Secretaries of
Galle Tea Co., Ltd
Teesta Valley Tea Co., Ltd

Agents for
British Dairyming Tea Co., Ltd
Ambur Tea Co., Ltd
Nuddea Tea Co., Ltd
Luxmi Tea Co., Ltd
Sahabad Tea Co., Ltd

These combined companies have under cultivation a total area of 14,080 acres

The firm's extensive activities in connection with the tea industry led to the development of the other chief sections of their business, viz that of engineering, more especially as relating to constructional work in connection with tea plantations, such as the erection of factories, withering houses, godowns, roof trusses, residences, coolie lines. The engineering department deals also with all kinds of agricultural implements, wood-working, and other machinery, engine pumps, oils and paints, metals, tools, and, in fact, general requirements for railways, shipping, mills, collieries, etc.

Messrs Davenport and Co., Ltd, are secretaries of Bell's United Asbestos (India), Ltd, subsidiary to the renowned Bell's United Asbestos

Co., Ltd, London, manufacturers of the everlasting "Bigsix" asbestos-cement corrugated roofing. They are likewise secretaries of Lewis and Tylor, Ltd, and agents for the following

H. L. Rochut & Co
A. & F. Parkes & Co., Ltd, Birmingham
Acheson Graphite Co., Niagara Falls
The Brown Instrument Co., Philadelphia
Cromil Engineering Co., Ltd, Newcastle-on-Tyne
Henry Wells Oil Co., Ltd, London and Salford
Charles Bingham & Co., London
'Bimco' (1924), Ltd, Coventry
Foamite Firefoam Ltd, London
Exors of James Mills, Ltd, Bredbury
Buys & Co., Ltd, Sheffield
August's Muffle Furnace, Ltd, Halifax
Drabble & Sanderson, Ltd, Sheffield
Hauck Manufacturing Co., New York
Alloy Welding Processes Ltd, London
Lambanks Co., London
Unbreakable Pulley & Mill Gearing Co., Manchester
Murlces Bickerton & Dry Ltd, Stockport
Norris Henry & Gardner Ltd, London and Manchester
Parkei Winder & Achmeh, Ltd, Birmingham
Thos Piggott & Co., Ltd, Birmingham
H. I. Roberts, London
State Assurance Co., Ltd
Ocean Accident & Guarantee Corporation, Ltd

The telegraphic address of Messrs Davenport and Co., Ltd, is "Davenports," Calcutta, and they use all the standard codes

MARSHALL, SONS and CO (INDIA), LTD, Manufacturers of Steam Engines and Boilers, Road Rollers, etc, 99, Clive Street Works: Agarpara

It is believed that fully 80 per cent of the steam engines in India have been manufactured by Messrs Marshall, Sons and Co., Ltd, whose Britannia Works, established since 1848, at Gainsborough, England, occupy an area of about 45 acres and give employment to 5,000 workmen. From the commencement of their business that well-known firm formed connections with India, where, through the excellence of its service and supplies, its trade had attained great development by the year 1914.

The difficulty in obtaining spare parts and replacements during the War for the vast volume of machinery manufactured by the company and in use in India made it imperative that a works should be started in that country for the manufacture of certain lines of machinery of fundamental importance to indigenous industries, notably the tea industry. Accordingly a separate company, entitled Marshall, Sons and Co., (India), Ltd, was formed and commenced operations on March 27, 1919.

It is probable that no individual firm of engineers has done more to foster indigenous industries in any country than have Messrs Marshall, Sons and Co. (India), Ltd, in India. While most carefully studying the needs of the country, and keeping abreast of the times in scientific design, so that their steam engines, boilers, and machines of every description are thoroughly up-to-date and of the highest efficiency, they have always kept in mind and exemplified the para-

mount importance of simplicity of operation and continuity of service.

Every tea garden in India is equipped with machinery designed and manufactured by Marshall, Sons and Co., Ltd. In practically every town and village will be found Marshall's steam engines and boilers, driving flour-mills, rice-mills, oil-mills, cotton-gins, spinning and weaving sheds, and the like.

Irrigation and waterworks engineers have all used Marshall's machinery in the construction of their notable projects. The great forests of India, if explored to the heart, will reveal Marshall's engines and boilers and saw-milling machinery. Not a railway in India has been built except with the aid of Marshall's portable engines, driving pumps, mortar mills, concrete mixers, disintegrators, etc. There is scarcely a mile of first-class road in India which has not been consolidated with a Marshall's road roller.

The works at Agarpara (Eastern Bengal Railway), situated close to Calcutta, have been specially designed and equipped with the most modern appliances not only to manufacture machinery, but also to repair and re-condition plants of every description.

Messrs Marshall, Sons and Co. (India), Ltd, manufacture all kinds of fixed and portable steam engines and oil engines, boilers, road rollers, asphalt mixing plants, threshing machines, flax machinery, tea machinery, oil mills and mor-

tar mills, and specialise in the supply and erection of complete plants for cotton ginning, spinning and weaving, rice, flour and oil milling, pumping, stone breaking, mortar mixing, and disintegrating

They maintain in India a large and fully qualified staff of engineers, and have branches at Calcutta, Bombay, Lahore, Madras, Bezwada, Coimbatore, Tanjore, Karachi, and Rangoon, where large stocks of machinery and spare parts are kept in specially constructed warehouses

Messrs Marshall, Sons and Co (India), Ltd, are agents for the following —

W H Baxter, Ltd, Leeds
Blackman Export Co, London
Blackstone & Co, Ltd, Stamford
Boilering, Ltd, London
Chubb & Son's Lock & Safe Co, Ltd, London
J Harrison Carter, Dunstable
Engelberg Huller Co, Syracuse, New York
Gwynnes, Ltd, Hammersmith, London
Hayward, Tyley & Co, Ltd, London
A Ransome & Co, Ltd, Newark-on Trent
Rose, Downs & Thompson, Ltd, Hull

HALL and ANDERSON, LTD, Departmental Stores, Chowringhee Road and Park Street

EVERY business establishment catering to retail trade assumes an individuality of its own. Some become specialised in cheap goods of corresponding quality, others exemplify "the little more and how much it is, and the little less and what worlds away", and a few are operated on lines that have no special bearing on the multifarious

growth, but a steady evolution of the scientific principles regulating all the details of their business. There is no haphazard replenishing of the stock in its numerous departments. On the contrary, its organisation is such that the minutest details are studied with a care that results in shipments from the best sources of production



SCENES IN THE PREMISES OF HALL and ANDERSON, LTD

requirements of the masses, but are regulated entirely by an undeviating regard for the superlative demands of the fastidious minority. In an attempt to portray the individuality of the large business of Messrs. Hall and Anderson, Ltd, the simplest method is to form a general estimate of the likes and dislikes of the entire cultured community of Calcutta in goods of every description, and say that this discriminating British firm, long experienced in anticipating as well as meeting the fluctuations of demand and supply, have succeeded in a correct interpretation of all that is best and most suitable for the idiosyncrasies of custom and condition, of climatic necessity and social recognition, in nearly every department of the daily routine of life. An achievement of this nature would be much simpler in any centre not providing such a medley of peoples and such a unique characterisation as does Calcutta. The attainment of Messrs Hall and Anderson, Ltd, to the position of authoritative exponents of the adaptability of the highest class of merchandise to Calcutta's cosmopolitan trade is of no mushroom

overseas of materials not only embodying the latest improvements in texture and design, but also in those innumerable characteristics of quality and suitability which are essential for the approval of the discerning public that avails itself so confidently and appreciatingly of the firm's supplies

When the business was started in a small way in 1891 fashions in apparel were very different from what they are to-day. Those were the days of the long sweeping dresses, tight waists, leg-of-mutton sleeves, and overwhelming millinery, a striking contrast to the grace, beauty, and sensibility of the feminine habiliments charmingly displayed in the sections of Messrs Hall and Anderson's store with which the ladies of Calcutta are so familiar. From the firm local belles and belles in the Victorian era obtained their outfits, and doubtless there are still not a few elderly dames who recall with emotion the selection of their wedding trousseaux from Messrs Hall and Anderson, Ltd, when "God save the Queen" was the finale of every public performance

The premises (the firm's own property) have two stories, occupy an area of about two acres, give employment to between 300 and 400 persons, have a magnificent window display of 800 feet, and form one of the largest shopping emporiums in the Indian Empire. Enlarged from time to time to meet the constant development of the business, the handsome and extensive establishment is a testimony to the popularity of its service and supplies and the ability with which the business is managed. The entrance in Park Street is exceptionally imposing, and its rich and artistic character is without duplicate in any other store in the Orient. The internal appointments are on a scale of elegance conformable to the wealth of beautiful and utilitarian goods displayed very artistically throughout the many sections. Each of these is so complete, and conducted on such manifest high-class lines, that it is really difficult to say which is most worthy of encomium. Gentlemen as well as ladies are catered for by Messrs. Hall and Anderson, Ltd., with noteworthy discrimination, and in the dressmaking, millinery, and tailoring departments experts fulfil the most exacting demands and interpret the latest fashions in everything that can be associated with apparel for both sexes, and for all occasions.

Much could be written on the departments for furniture, carpets, curtains, linen, china, and glassware, etc., an inspection of which invariably leads

to more extensive purchases than are intended on first entering, for the allurements to buy are so potent because of novelty and goodness, of delightful harmony and adaptability to every possible need, that Messrs Hall and Anderson, Ltd., may regard their household departments with well justified pride and satisfaction. Perhaps the latter word is inadmissible. The expression of art never attains satisfaction, but reaches out ever to the infinite, and is always dissatisfied with present achievements, however great they may be. Art and utility! That combination may be termed the keynote of the popular business in question, which is much larger than is indicated by its fine premises.

Messrs Hall and Anderson, Ltd., are also large contractors to many of the commercial undertakings in India, and have a branch at Darjeeling. They have the honour of appointment to H M the King-Emperor, also to The Lord Irving, Viceroy and Governor-General of India.

The business was founded by Messrs P M Hall and W Anderson, governing directors of the company into which the firm was formed in 1913. The other directors are Messrs F P Milford, H R Norton, and W Shirras. The company's telegraphic address is "Hallson," and the codes used are the A B C 5th edition and Bentley's.

BROOKE BOND INDIA, LTD., Wholesale Tea Merchants, Blenders and Packers, 2, Metcalf Street

When Sidney Smith, the witty cleric of the nineteenth century, fervently said "Thank God for tea, I am glad I was not born before tea," it is quite certain he was not accustomed to tea like the insipid kind sometimes inflicted upon one in India. Why does one fail so often to get good tea there? The explanation is simple. The tropical climate of India, so necessary for the growing of tea, is liable to ruin it after it has been plucked and manufactured. It frequently happens that this extremely sensitive product is spoiled before it reaches the consumer. Tea that has lost its flavour and stimulating properties has nothing to recommend it at all. One may as well drink hot water.

Various types of tea containers have been tried in the hope of overcoming this difficulty. But the problem was never really solved until the introduction of the Brooke Bond patent vacuum tin. That method of packing certainly represents an adequate solution for the difficulty, for tea so packed will remain in perfect condition, not only for weeks and months, but for years. The tin is air-tight and damp-proof, and before being sealed is emptied of air. The tea is left in a vacuum. Deterioration even to the slightest extent is impossible. Messrs Brooke Bond have the sole rights for this process in India. The cost of vacuum packing is not great, and as Messrs Brooke Bond pack a

very large quantity by the process, the cost of it, when worked out on each single pound, is so small as to make no difference to the price of tea.

The great Brooke Bond Company is represented in India by its subsidiary, Brooke Bond India, Ltd., which was formed in 1912, has its headquarters at Calcutta, and branches at Madras, Bombay, Ahmedabad, Karachi, Nagpur, Delhi, and Rangoon, and upwards of 400 depôts throughout the peninsula. The company's premises at Calcutta have undergone very great development as the result of the continual increasing demand for the famous Brooke Bond teas in their unsurpassed containers. Their factory in Hide Road gives employment to about 500 persons, occupies an area of about five acres, and is admirably situated alongside the Port railway, which greatly facilitates the reception of their huge quantities of tea and, after preparation and blending, the despatch of it throughout India and Burma.

The blending of the Brooke Bond teas is performed by English experts of very long and extensive experience, and nothing is omitted in the entire working of the factory that can contribute to the quality of its output. Machinery is employed to such an extent that hand contact with the tea is eliminated. Scrupulous attention is exercised everywhere for the maintenance of the utmost cleanliness in every detail, thus the packers and

coolies are supplied by the company with an entire change of clothing twice a week, and for that purpose the company employ a large laundry staff.

Two standard blends of leaf tea are packed in tins bearing the company's well-known autograph labels, the colours of which indicate the two qualities, thus, red labels are for the first or better quality, the green labels for the second. The company's famous "Kora" dust tea is put up in yellow packets, and is a household word throughout India. It is turned out by electrically driven machines in exceptionally neat packets, ranging in weight from a pice packet up to 1 lb. The term "dust tea" may be misleading, for it is really a "grainy fannings" from the best gardens of Northern India, the liquor obtained therefrom being rich and full of flavour. Dust tea is

without doubt more economic in use, and is made into liquor much more quickly than leaf tea.

The company's imposing four-storey building in Metcalf Street forms their headquarters for India, and its various departments include one where the different qualities of teas from the plantations are tasted and the subtleties of their various blends arrived at, the actual blending being performed in the Hide Road factory, as already indicated. In the Metcalf Street establishment is also the Export Department, which attends to the shipment of the Brooke Bond tea from Calcutta to all parts of the world.

The company's telegraphic address is the appropriate one of "Blenders," Calcutta, and the codes used are Bentley's and the A B C 5th edition.

T E THOMSON and CO, LTD, Mechanical Engineers, Wholesale and Retail Ironmongers, Hardware Merchants, etc, 9, Esplanade East

IN these days of constant change and the debacle that ever menaces by the fluctuations in the value of money and its collateral, whether in the form of goods or real estate, firms spring up and vanish with astounding rapidity, and the lapse of a few years often makes a great difference in the nomenclature of the Eastern commercial communities. Although this has been well exemplified in Calcutta during the last decade or two, there are, however, in striking contrast several very noteworthy concerns whose records date back to more than 100 years. Amongst them is that of Messrs T E Thomson and Co, Ltd, which was established in 1820, the year of the accession of George IV to the Throne, and when the Earl of Moira, P C, was Governor General of India. The continuation of a business for such a long period is no small achievement, especially in Calcutta, where innumerable more disasters and untoward circumstances menace continually the men or methods not in perfect adaptation to environment than in the more hygienic and less strenuous conditions of life in the homeland. The vicissitudes of demand and supply can be carefully guarded against, but death ever takes its toll of experienced men of wisdom and keen understanding, and the concerns which under their able direction prospered exceedingly, often fade away under the management of less capable successors. Such, however, has not been the case with the business under review. From its formation in the distant past, when the walls of Fort William bristled with the crude guns of the period, and there was not a steamer on the Hooghly River, Messrs T E Thomson and Co's activities have continued throughout the succeeding decades on the lines of ability and integrity that have ever been their characteristics. Kingdoms have risen and fallen, ancient dynasties have passed away, but Messrs T E Thomson and Co's business has withstood all the assaults of time and circum-

stance, and proved a praiseworthy example of English steadfastness in many a commercial crisis. Founded by Mr T E Thomson on the site now occupied by a portion of the Great Eastern Hotel, the business developed steadily, and as the premises became too small for its requirements, it was removed in 1853 to No 9, Esplanade. In that well-known establishment, which has been enlarged and improved from time to time, and now covers a land area of more than 20,000 square feet, is displayed a stock of general hardware, ironmongery, building requirements, tools agricultural and industrial, machinery, etc, that embraces the entire range of universal supply in that connection, and is one of the most varied collections of such things that can be found anywhere. The great expansion of the business and the need for more ware house accommodation led the firm to acquire, a few years ago, a large site near the Ballygunge Railway Station, where they have erected a modern engineering establishment, known as the Gariahat Engineering Works, and where some hundreds of persons are employed under expert European supervision.

A few years ago the firm was formed into a limited liability company, and is a subsidiary of Messrs John Shaw and Sons (Wolverhampton), Ltd. The General Manager is Mr J H Wiggett, and the Assistant Managers, Mr G Ewart and Mr F J Lane. The firm's telegraphic address is "Hardware" and the codes are the A B C 5th edition and Pantelegraph. They are agents for

Pettets, Ltd, Yeovil, Oil Engines
Thomas Chatwin, Birmingham, Engineers' Tools
Smith & Wellstood, Bonnybridge, Cooking Ranges
Richmond & Chandler, Ltd, Manchester, Corn
Crushers
L S Starrett & Co, Fine Tools
Charlton Silicate Paint Co, Paints

REMINGTON TYPEWRITER CO (INDIA), LTD, Remington Building, 3, Council House Street.

"THERE was no such word as typewriter until Remington made the first machine in 1875." So the Remington Company say in their attractive booklets, which also tell of the crudity of the first typewriter—it wrote only capital letters, and had a line shift operated by a foot tread. That original typewriter, and also a more elaborate one which was exhibited at the Philadelphia Centennial in 1876, are on exhibition in the Remington Building in New York. The successive milestones of Remington progress and leadership are the first typewriter, the first shift-key, the first automatic ribbon reverse, the first decimal tabulator, the first adding and subtracting typewriter, the first key-set tabulator, the first self-starting typewriter, and the first portable typewriter with standard keyboard.

The latest Remingtons are the last word in typewriters. The new Standard No. 12 has all the qualities for which the Remington typewriter has always been famous—unequalled durability, reliability, and capacity to stand up under continued hard usage, but the real advance it demonstrates is in its many refinements of construction, which combine to make the operation of the machine simpler and quieter, and the day's work much easier, bigger, and quieter.

Other wonderful inventions are the No. 6 Remington Noiseless, which so effectively meets its purpose that a battery of fifty of these machines at work causes no disturbance, the new Remington Bookkeeping Machine, and the Remington Accounting Machine, which are saving no end of money, time, and labour all over the world. The Remington Portable, with its case only four inches high, is the most popular and most efficient portable machine in existence.

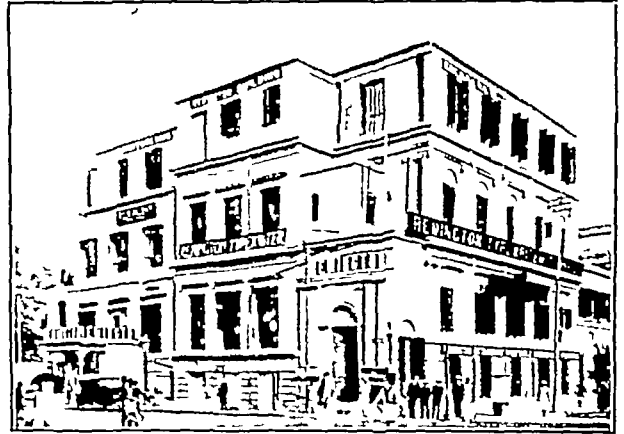
More than 80 per cent of the typewriters used in India are Remingtons. Their introduction into that country commenced in 1896 through an agency at Calcutta, but in 1903 the Remington Company, desirous of giving to the people of India the same service as obtained in London, New York, and other Western cities, opened at Calcutta a branch which has since developed enormously, and is now the headquarters in the Indian Empire of the Remington organisation, giving employment to about 700 persons and comprising no fewer than 25 offices.

In 1914 the Remington interests in India were incorporated under a new company entitled the Remington Typewriter Co (India), Ltd, separate and distinct from the parent company, but related to it financially. Since then, with the remarkable expansion of the business, subdivisions have been effected from time to time for the purpose of more efficient operation and control, and the Remington organisation in India is now as follows—

REMINGTON TYPEWRITER Co (INDIA), LTD, Calcutta, with offices at Allahabad, Chittagong,

Simla, Dacca, Delhi, Lucknow, Patna, and Cawnpore.

REMINGTON TYPEWRITER Co (BOMBAY), LTD, Yusuf Building, Bombay, with offices at Karachi, Nagpur, Poona, Indore, C I, Hyderabad, Deccan, Quetta, and Jubbulpore.



CALCUTTA OFFICES OF REMINGTON
TYPEWRITER CO (INDIA), LTD

REMINGTON TYPEWRITER Co (PUNJAB), LTD, with offices at Lahore, Peshawar Cantt, and Rawalpindi.

REMINGTON TYPEWRITER Co (BURMAH), LTD, with offices at Rangoon and Mandalay.

REMINGTON TYPEWRITER Co (MADRAS), LTD, with offices at Madras and Bangalore.

REMINGTON TYPEWRITER Co (CEYLON), LTD, Del Mel Building, Chatham Street, Colombo.

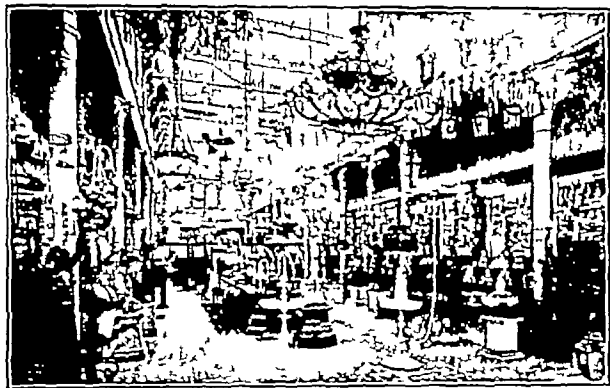
The managing director of the Indian organisation of the Remington Typewriter Company is Mr F J Hull, who joined the business in 1908 as assistant manager. Since his connection with it the turnover has increased sixfold.

It is worthy of note that the Remington building in Calcutta is the only office building actually owned by the Remington Company outside of the United States. It gives employment to nearly 200 persons, and, like all the other Remington offices in India, has a very efficient department for repairs and the overhauling of machines, which are effected by experts specialising entirely in that work year after year. Arrangements are now in hand which may result in the near future of the erection on the same site of a much more palatial structure that will certainly be the finest and largest Remington office building outside of America.

The Remington Typewriter Co (India), Ltd, are agents for the Dalton Adding Machines, Britannic Calculating Machines, and the office equipments of the Kardex Co, Library Bureau, Safe Cabinet Co, and the Baker Vawter Co. The telegraphic address for all the Remington offices is "Remingtons," and the codes used are Bentley's, Western Union, and the A B C 5th edition.

F and C OSLER, LTD , Electrical Engineers and Contractors, 12, Old Court House Street

MANY of the business undertakings in Calcutta are of striking individuality and without duplicate in India. Among these may be instanced the establishment of Messrs F and C Osler, Ltd , which is exceedingly interesting and instructive in connection with the remarkable development in India of electricity as applied to every possible form of power, ventilation, and illumination.



SHOWROOM OF F and C OSLER, LTD

Messrs F and C Osler, Ltd , have been established since 1807 at Birmingham, where they have large works employing many hundreds of people in the manufacture of electric light fittings and fans. Electric light fittings of their manufacture are, of course, known throughout the world for quality of design and workmanship, while the "Osler" fan, which may be said to have been the pioneer of electric ceiling fans, still retains its place in the very forefront as a standard by which other fans are judged.

Messrs F and C Osler, Ltd , were established in Calcutta in 1847. In their expansive showrooms may be seen magnificent examples of the manufacturers' art in metal and cut-crystal electroliers, for which the firm are unsurpassed. Some idea of the wide range of these is given by the accompanying illustration. They are available for immediate delivery, and particularly noteworthy are the magnificent electroliers in cut-crystal, bronze, and other metals, which form the centre pieces of the brilliant display. Many other works of art, such as bronze statues, floor and table standards, and a wide range of smaller metal and crystal fittings suitable for all conceivable

situations, combine to make the showrooms in question the most attractive of their kind in the East.

It is not to be supposed that Messrs F and C Osler's activities are restricted to the manufacture and sale of electric light fittings and fans. As electrical and mechanical engineers, they undertake contracts for the complete installation of electric light, power, pumping, ventilating, and refrigerating plants, and they have carried out numerous important contracts throughout India, Nepal, and Afghanistan. At the Coronation Durbars at Delhi in 1903 and 1911 they were responsible for a great deal of the electrical work, including the whole of the installation in the camp of His Majesty the King Emperor.

The Calcutta premises occupy an area of about two acres. The numerous departments and workshops are arranged in a system that is the outcome of long experience of the best methods of procedure, and the work done by them covers practically everything pertaining to the manufacture and repair of all kinds of appliances for electric power and illumination.

As indicating the wide scope of Messrs F and C Osler's activities, it may be said that they in addition to handling their own manufactures of electric light fittings, fans and heating apparatus, are agents in India for the following:

- Rees Roturbo centrifugal pumps, condensers motors and dynamos
- R A Evans, Ltd , electric lifts—passenger, goods and service
- Walter Macfarlane & Co , ornamental cast iron work
- Metropolitan-Vickers' "Cosmos" lamps
- W T Glover & Co's V I R cables and flexibles
- Exide batteries
- Levland Roturbo portable fire engines
- Ariel Manufacturing Co's tools
- British Singamo electricity meters
- Wardle Engineering Co , watertight lanterns and reflector fittings
- Stuige & Baker, Ltd flexible winders
- The Relay Automatic Co , Ltd
- Kohler Automatic Co's lighting sets
- ILG Electric Ventilating Co , ventilating fans and blowers

The firm have branches at Bombay, Delhi, Lahore, and Madras. The telegraphic address is "Oslerco" at all offices, and the codes used are the A B C 6th edition and private.

C LAZARUS and CO., LTD , Furniture Manufacturers, Decorators, Billiard Table Makers, etc , 18, Park Street

THE business of Messrs C Lazarus and Co , Ltd , is the largest and oldest of its kind in the Indian Empire, and there are few similar undertakings in the world with a longer history. It was founded in 1822, and has since that time been an authoritative exponent of fashion and fancy in everything appertaining to furniture, house furnishing, and general decoration. It was established in the reign of George IV , when

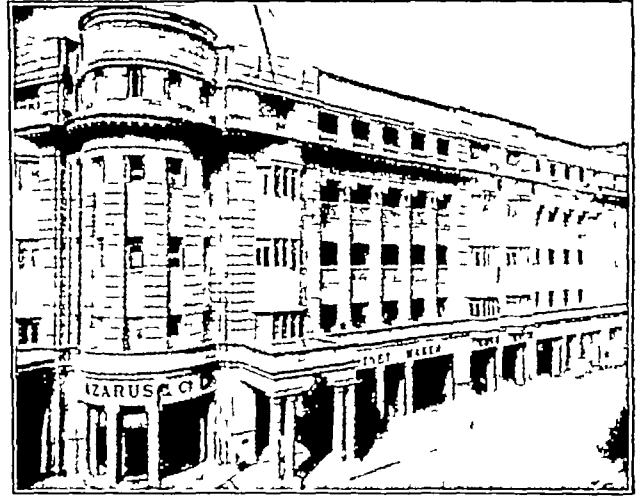
equipments of homes and offices were vastly different from what they are to-day. Not much change occurred during the succeeding reigns of William IV. and Queen Victoria until the commencement of that of Edward VII , when the modern styles may be said to have had their initiation.

It was not, however, until about 1911, when the firm was formed into a limited liability com-

pin, that the great educational effects of modern culture began to have their expression in innumerable details that had previously been regarded as beyond the pale of change and improvement. The old styles, ugly but utilitarian, with their horse-hair upholstery and their antimacassars, have gone for ever. Utility is still the dominant note, but it is redeemed by interpretations of art, exquisite in simple and chaste designs. An inspection of the stock in the large and handsome showrooms of Messrs C Lazarus and Co., Ltd, provides an object lesson in the requirements of to-day in everything pertaining to the equipment of the home, but comprehensive as that display is, it is totally inadequate as a representation of the versatility of the firm in the wide domain of their activities. They employ about 400 people, and in their factory at Entally are produced wood-work and upholstery of every description.

Amongst the departments in the firm's premises in Park Street is one where highly skilled men are constantly engaged in designing furniture to order, or for the augmentation of the stock, which is drawn upon continually by people throughout India. Messrs C Lazarus and Co., Ltd, operate on a very comprehensive scale also as general decorators. During their long existence they have fulfilled very many large contracts for the decoration and furnishing of palaces, mansions, and institutions throughout India. Amongst the many notable examples of their work in Calcutta are the decorations and equipment of Firpo's restaurant and ball-room, the offices of the North British Insurance Co., Scottish Union and National Insurance Co., Turner, Morrison, and Co., Ltd, and Thomas Cook and Co's new building in Dalhousie Square, etc. In addition to these, all the branches of the Imperial Bank of India in North India and many other institutions bear testimony to the ability of Messrs C Lazarus and Co., Ltd, in everything

relating to wood-work, mural decoration, and plaster-work. Their stock of carpets and rugs, wall papers, and other details of household requirements is well calculated to meet the most diversified requirements, and includes, besides their own productions, goods of celebrated manufacturers, such as the Tyne Castle Decoration;



PREMISES OF C LAZARUS and CO., LTD,
PARK STREET.

“Robbialsac” Enamel, Sanderson's Wall Papers, and Aster Cane Furniture, for which the firm are agents.

Messrs C Lazarus and Co., Ltd, are also manufacturers of billiard tables. They have the honour of appointment to H M the King, and His Excellency Lord Reading, Viceroy of India from 1921 to 1926.

The directors are Messrs. R H Ratchiffe and W Arnfield, who have been connected with the business for many years. The firm's telegraphic address is “Mahogany, Calcutta,” and the codes used by them are the A B C 5th edition and Bentley's.

STEUART and CO LTD Coach-builders and Motor Engineers, Mangoe Lane, Park Street, and Ballygunge

It is but fitting that the name of the ancient Scottish monarchy should designate the oldest firm of coach-builders and motor engineers in the Indian Empire. Kings and queens have ever been associated with magnificent coaches, and it is probable that no vehicles ever built have surpassed in beauty of outline and gorgeous detail those which have been constructed by Messrs Steuart and Co., Ltd, during the fifteen decades their business has been established in the commercial capital of India.

There has not been a single vehicle on the roads during the past 150 years which has not had its type in the workshops of Messrs Steuart and Co., and they have not only built carts and carriages for every day use, but they have been entrusted with commissions for elegant State coaches, largely composed of gold, silver, and

precious stones, and fitted with the most costly appointments. Amongst these special mention should be made of a State howdah for the use of King Edward when Prince of Wales in 1876. About two years later they constructed a carriage for the Maharajah of Jind, which was enriched by 25,000 tolas (tola=7 dwts 12 grains troy) of silver. In 1882 and subsequent years gorgeous vehicles were supplied by them to the Nawab of Bhawalpore, the Commander-in-Chief of Nepal, and the Amir of Kabul. A solid silver howdah was despatched by the firm to the Durbar held by Lord Curzon in 1902. No fewer than 22 landaus and 18 victorias were supplied for the Viceroy's personal guests. Messrs Steuart and Co. also supplied a most ornate carriage for the King-Emperor when, as Prince of Wales, he visited India in 1906, and another exceedingly handsome carriage in 1911,

after his succession to the throne. Many State and other carriages were built by the firm for receiving chiefs, princes, and other notable persons for the imposing ceremonies associated with the Royal visit, and it should be added that they have held special appointments to all the Viceroys of India, and have enjoyed the patronage of nearly every ruling chief in the country.

An example of their facilities and resources for the rapid execution of urgent work is afforded by the order which they recently received from the Maharajah of Bikanir for two State coaches which were wanted within a month in connection with a visit of the Viceroy. The vehicles were delivered within the time stated, and gave the utmost satisfaction.

The advent of the motor car naturally made considerable difference to all builders of carriages, and the enterprise of Messrs Steuart and Co was manifested when, realising that a new page had been opened in connection with vehicular traffic, they quickly put themselves in a position to meet the change in requirements of customers. Their principal works occupy five acres in the Ballygunge district of Calcutta, and give employment to between 800 and 900 persons. The machinery plant is of the most modern description and embraces everything that can be suggested for the perfection of process and result in all the details of motor engineering, including the building of motor bodies of every description.

The firm's establishment in Mangoe Lane is one of the largest repairing garages in the city. They have also excellent showrooms in Park Street.

Messrs Steuart and Co, Ltd, are agents for the celebrated Austin cars, which are in great and growing popularity throughout India, as well as in all other countries.

The early records of the business date back to 1775, thirty-five years after the battle of Culloden, when the hopes of Bonnie Prince Charlie were dispelled for ever. The records were preserved in an old iron safe, the key to which was unfortunately subsequently lost, and when at last, in 1885, the safe was opened by force it was discovered that the interior was coated with rust and that white ants had destroyed every vestige of the papers, leaving only a heap of dust. Some of the old leases relating to the original property of the firm are still in existence, and contain the names of Capt Robert Steuart and Lady Mary Steuart, who in all probability were descendants of the founder of the concern.

The personnel of the firm has, of course, been altered from time to time. In 1919 it was formed into a limited liability company, of which the Director and Manager is Mr G H Crane William, the other Directors being Messrs H Hannay, G Weston, and J S Pattinson. The company's telegraphic address is "Coteline," and the codes used are A B C 6th edition and Bentley's.

SHAW, WALLACE and CO, Merchants and Agents, 4, Bankshall Street

THE firm of Shaw, Wallace and Co was formed in 1886, but their business is actually much older, for its founders, Mr David Shaw and Mr C W Wallace, joining in partnership together, took over the interests of Messrs Shaw, Finlayson and Co, who had been established for many years previously.

At that time the tea industry of Northern India was in its infancy in comparison with its later phenomenal development. Amongst the interests which Messrs Shaw, Wallace and Co had taken over, as already indicated, was the management of a number of important tea estates, and since that date the firm have been very largely engaged in the same connection, being now the managing agents of

Kingsley Golaghat-Assam Tea Co, Ltd
New Samanbagh Tea Co, Ltd
Nambuinadi Tea Co, Ltd
New Puiupbari Tea Co, Ltd
Orang Tea Co, Ltd
Rajnagar Tea Co, Ltd
Tezpoie Tea Co, Ltd
Kring Tea Seed Estate

and agents for

Assam Frontier Tea Co, Ltd
Buxar Doon Tea Co, Ltd
Dima Tea Co, Ltd
Lusherpore Tea Co, Ltd
Surmah Valley Tea Co, Ltd
Doon Tea Co, Ltd
Singhia Jhora Tea Estate

It was not long before Messrs Shaw, Wallace and Co began to exert a marked influence in the importation of piece-goods, and so greatly has their trade therein grown that their name is now one of the most consequential amongst the textile manufacturers of Manchester, the Continent, America, and Japan.

An important event in the history of the business was its absorption in 1891 of that of Mitchell Reid and Co, whereby Messrs Shaw, Wallace and Co became agents for the Burmah Oil Co, Ltd. They are now also agents for the Anglo-Persian Oil Co (India), Ltd, The Assam Oil Co, Ltd, Tank Storage Co (India), Ltd, and managing agents of the Tinsplate Co of India, Ltd, at whose works tinsplates for kerosene and petrol containers are produced in vast quantities. The influence, therefore, of Messrs Shaw, Wallace and Co in the oil trade of India is obviously very great.

In 1901 they opened a branch at Bombay, followed in 1906 by another at Madras, and in 1907 by the one at Karachi. Thereafter more branches were started at Colombo, Aden, Morungao, Cochin, and Coconada. Messrs Shaw, Wallace and Co are thus established at every point of importance on the Indian coast. Their activities are as widespread as their representation, and in practically every branch of commerce.

in India they hold very considerable interests. They are, for instance, also managing agents of

Amalgamated Coalfields Ltd
Huntodih Coal Co., Ltd
Kharajpur Coal Co. Ltd
New Tetturva Coal Co. Ltd
North Damuda Coal Co. Ltd
Nazira Coal Co. Ltd
Pench Valley Coal Co. Ltd
Bengal Nagpur Cotton Mills, Ltd
Hooghly Flour Mills Co. Ltd
United Flour Mills Co., Ltd
Binduram Tannin Extract Co. Ltd
Kerram, Ltd
Indo Agri. Ltd
The Diamond Drilling & Prospecting Syndicate

Messrs Shaw, Wallace and Co are unsurpassed for meeting the growing needs of India and Ceylon for fertilisers for all purposes by the facilities and resources of their Atlas Fertilisers Works, Kidderpore, the Dhappa Manure Works, Dhappa, and the Atlas Works, a few miles from Colombo. They are secretaries of the Fertiliser Propaganda of India, Ltd, and agents for the British Sulphate of Ammonia Federation.

Amongst the importations of Messrs Shaw, Wallace and Co are timber, wire ropes, paints, explosives, metals, agricultural implements, sugar, etc., and they are exporters of all Indian products. They are amongst the largest jute

merchants, with pressing and baling establishments under the supervision of their own staff, and their shipments of jute under their own marks, as well as gunnies, to the markets of the world have more than once brought their name to the top of the list of the other exporters of these materials.

Messrs. Shaw, Wallace and Co are also agents for

Royal Insurance Co., Ltd
Liverpool and London and Globe Insurance Co., Ltd
General Accident, Fire & Life Assurance Corporation, Ltd
Eagle Star & British Dominions Insurance Co., Ltd
Excess Insurance Co., Ltd
Union Marine Insurance Co., Ltd
Royal Exchange Assurance Corporation
Queensland Insurance Co., Ltd
L'Union Fire Insurance Co., Ltd, of Paris

The partners in the firm are Mr H S Ashton, Lord Greenway, Messrs A C Hue, E A Chettle, R C Caw, G Kingsley, K Campbell, J L Milne (London), A Alker, J B Backhouse, H F. Bateman, A Bremner, W R C Brerley (Calcutta), and A B Morrison (Bombay).

The firm's telegraphic address is "Shawlace," and they use all the standard codes.

G F KELLNER and CO, LTD,

Wine Merchants, Contractors, and Regimental Mess Agents, etc, 32, Chowringhee Road

EATABLES and drinkables, or should it be drinkables and eatables? The synonym for these in Calcutta might well be "Kellner," a name that is popularly known not only in the great commercial capital, but also throughout a very large portion of the Indian Empire. Whatever changes may occur in households or nations, in private exchequers or Government resources, people must eat and they certainly must drink, especially in India, the land where thirst is pre-eminent and prodigious, and Messrs G F Kellner and Co., Ltd, have met these elemental necessities for more than seventy years. Their business was established about the time of the Indian Mutiny—so far as records show, in the year of that historic event, 1857, and the influence it has since exerted by its service and supplies in India is very much greater than is indicated by commercial development and dividends on the yearly balance sheet. Kellner! how the name reverberates down the corridors of time, in the annals of homes, clubs and messes, in city and suburb, in hill station and lonely bungalow, amongst the tea gardens, or the lofty latitudes of the North. Many thousands of railway travellers, too, have looked on that name with gladness because of the refreshment it connoted in long, hot, dusty journeys over the iron ways of Hindustan. Messrs Kellner have always been prominent as caterers, they opened their first refreshment

room at Burdwan in 1853, and now control a system of railway refreshment rooms and branches extending for more than 4,000 miles from How-



PREMISES OF G F KELLNER, and CO, LTD.,
CHOWRINGHEE ROAD.

rah to Simla in the North, and Howrah to Jubbulpore and Nagpur in the West. The firm were the pioneers of railway dining-cars in India and have operated the dining-cars between Howrah

and Bombay and vice versa since October, 1897. When Royalty has visited India, and on other great occasions, Messrs Kellner have been entrusted with the arrangements for catering in all branches, including the contracts for the great Delhi Durbar camps and their adjuncts in 1903 and 1911.

The firm's headquarters in Chowringhee Road occupy an area of 42,000 square feet, and the system throughout the many departments has for its object the perfection of storage conditions and the utmost efficiency in every detail relating to the service placed at the disposal of customers.

The department where the orders are despatched is indeed a very busy place, and an eloquent indication of the popularity of the firm as well as the flourishing trade they transact. The huge stock of wines, spirits, and alcoholic liquors of every description embraces practically all the best known brands on the market, and the same remark applies also to the groceries and provisions imported direct from the leading sources of supply throughout the world.

The nicely appointed retail store in front was opened in 1924, and its popularity is enhanced by its cold storage facilities, which provide the choicest English dairy produce and other perishable commodities in the finest possible condition.

The firm was formed in 1921 into a limited liability company with a capital of 36 lakhs, divided into Rs 20,00,000 ordinary shares and Rs 16,00,000 preference shares. The directors are Messrs J O Robinson (chairman), L C Nicholson, A M H Russell (manager), G V Pike and A M Ballingall. The telegraphic address is "Kellners," Calcutta, and the code used is Bentley's.

Messrs G F Kellner and Co, Ltd, are proprietors of Kellner's "O H M S," "Green Seal," "I C S," and "White Seal" whiskies, and are agents for the following:

The Distillers' Agency, Ltd, Edinburgh
King George IV Whisky, Gold Label
John Haig & Co, Ltd, Dimple Scots and Gold Label Whiskies
Stewart's T V F Whisky

Sanderson's "Vat 69" Whisky
Arthur Bell & Sons, Ltd, Old Scotch Whisky
Peter Dawson, Ltd, P D Special Scotch Whisky
Wm Greer & Co, Ltd, "O V H" Whisky
John Jameson & Sons Ltd, Irish Whisky
John Power & Son, Irish Whisky
Justin & Brook's 60 years' old Liqueur Brandy
J & F Martell, Brandy
Otard Dupuy & Co, Brandy
Pommery et Greno, Champagne
Hutch, Mansfield & Co, Ltd, Wines and Spirits
Mackenzie & Co, Sherry
Mackenzie, Discoll & Co, Port
Hedges & Butler, Ltd, Wines and Spirits
Feuerheerd, Wearne & Co, Ltd, Sherry and Port
Rutherford & Miles, Madeira
A Lalande et Cie, Claret
Maire et Fils, Burgundy
Lungenbach & Sors, Hocks and Moselles
S Smith & Sons, Australian Wines
Vin de St Raphael Co, St Raphael Wine
E Cusnier Fils Aine et Cie, Liqueurs and Cognac
The D O M Benedictine Co, Liqueurs
Peter F Heering, Liqueurs
Drambuie Liqueur
Francesco Drioli, Maraschino
Vin Der Hum Liqueur
Martini & Rossi, Italian Vermouth
Boord & Sons, Gin
Read Bros, Ltd, Bass and Lager Beer
J & R Tennent, Ltd, Beer
Beck & Co, Beck's Beer
Wm Younger & Co, Ltd, "Monk" Brand Bulk Beer
Spitzenbrau Brewery, Munich Black Beer
Löwenbrau Brewery, Munich Black Beer
Kloster Bräuerei, Kloster Beer
South Holland Brewery, Z H B Brand Light Lager
H & G Simonds, Ltd, Milk Stout
Henley's Cider
Schweppes, Ltd, Aerated Waters
Kia Ora Co, Ltd, Kia Ora Lemon Squash
Rose's Lime Juice
Getz Bros, American Canned Goods
Heinz Pure Food Products
Gillard & Co, Ltd, English Table Delicacies
El Trio Manila Cigars
Genesee Pure Food Co, Jelly Powders
4711 Eau de Cologne
Johann Faber, Pencils
Royal Baking Powder Co
Lotol Disinfectant
Spencer & Co, Ltd, Cigars
Tata Oil Mills Co, Ltd, Cocogem

BRITANNIA BUILDING AND IRON COMPANY, LTD, Constructional Engineers, Builders, Brass and Iron Founders and Sanitary Engineers, Norton Buildings

ATTENTION is being increasingly directed towards the important influence exerted by all material things on the subconscious as well as conscious minds of everyone coming within their sphere of operation. Day by day, for instance, the character of the designs of buildings impinges on subtleties of receptivity beyond the cognizance of the uninitiated or unreflecting. Hence it is that each city has its own individuality of impression, its psychometric story which synchronises continually with the evolutionary urge towards the

superlative behind the materialisation of modern progress.

The differentiation in each of the cities of India is changing with the changing years. The unceasing metamorphosis in Calcutta is being contributed to by the Britannia Building and Iron Co, Ltd, which is operated with ability that gets right down to rock bottom in all matters coming within the wide sphere of its activities, and constructs buildings of every description, from private dwellings to huge factories and office blocks. It was regis-

tered as a joint stock company in 1919, being an amalgamation of K. L. Mukherjee and Co. and the Britannia Brass Works.

Messrs K. L. Mukherjee and Co. were established as engineers and builders in 1867, and up to the time of the amalgamation mentioned had erected many well-known buildings in Calcutta and its environs, including the E. I. Railway Offices in Fairlie Place, extending from Chit Street to Strand Road, the steel work of the Jubilee Railway Bridge over the Hooghly River at Naihati, the Hooghly Flour Mills, built for Messrs Shaw, Wallace, and Co., and the factory buildings and all machinery erected for the Britannia Biscuit Co., Ltd.

Messrs K. L. Mukherjee and Co. were amongst the first firms of their kind to be placed on the Government list, and this position was confirmed by the Public Works and other Departments when the present company took over their interests.

Since its incorporation the Britannia Building and Iron Co., Ltd., has erected some of the most modern buildings in Calcutta, either to its own or to the designs of some of the leading architects and engineers.

The company also undertakes repairs, re-decoration, and alterations of any class, including sanitary and plumbing work, and has recently in that connection completed important contracts for some of the principal offices, hotels, and residences in Calcutta. For the wide scope of its activities it has admirable facilities and resources in its well-equipped general engineering establishment at 2,830, Grand Trunk Road, Howrah, and its central stores and wood-working department at 12-1, Wellesley Street.

The managing agents of the Britannia Building and Iron Co., Ltd., are Messrs Holmes, Wilson and Co., Ltd., described on page 93.

BRITANNIA BISCUIT COMPANY, LTD.
Registered Offices Norton Buildings, Old Court House Corner
Factories at Dum Dum and Bombay

THE story of biscuit making goes back to the beginning of things, and the former methods of hand operation, which continued throughout the ages, provide a striking contrast to the scientific processes and ingenious machinery now employed in the production of what is probably the most wholesome and acceptable article of food.

Modern biscuit manufacture in India has its largest representative undertaking in the business of the Britannia Biscuit Co., Ltd. The nucleus of that important concern was formed in 1897 by two Bengali gentlemen, who, by establishing a small factory for the production of biscuits on the outskirts of Calcutta, became the pioneers of the biscuit industry in India. The venture proved thoroughly successful, and when the Great War broke out its resources were taxed to the utmost by the demands made upon it for its excellent productions. The Government, for instance, found it invaluable for the supply of ration biscuits for British and Indian troops, both in India and Mesopotamia. Thousands of these ration biscuits were made, and their priority of claim necessitated the suspension of the firm's manufacture of sweet and fancy biscuits for two years and a half.

The great development of the undertaking in question led to the formation of the Britannia Biscuit Co., Ltd., with a capital of six lakhs of rupees, which took over the concern and enlarged and equipped the factory with new machinery, including the first gas-fired travelling chain oven ever brought out to the East. The capacity of the factory accordingly was increased from about 1,500 lbs of biscuits a day to a possible 10,000 lbs. In 1924 the capital of the company was again increased, and now amounts to twenty lakhs of rupees. Further extensive additions and improve-

ments were made to the factory and its equipment. It covers an area of $4\frac{1}{2}$ acres, gives employment to between 300 and 400 persons, and turns out daily several tons of biscuits of the finest quality. The plant, it may be mentioned, is exactly the same as that used in Great Britain and America by the largest biscuit manufacturers in the world. Hand contact with the biscuits throughout the process of manufacture is entirely eliminated. The baking of the biscuits in their progress in the travelling chain through the gas-fired ovens can be varied from three to thirty minutes according to the character of the biscuits, and the temperature can be raised or lowered with the greatest ease.

Mr Holmes, one of the directors of the company, writing about the industry in the local newspaper *Forward*, said "Like all new ventures in India, both the original pioneers previously mentioned and the many other people now associated with the industry have had to consider many points as their work progressed. This became particularly important when they began to move from the stage in which they were doing only a tea-shop business in loose biscuits quickly consumed by the public, to the more important position of manufacturing and tinning biscuits for sale in competition with imported goods. The suitability of Indian ingredients had to be carefully considered, and expert advice taken. The training of labour, not only in manufacture, but also in the equally important matter of proper packing, had to be undertaken. Climatic conditions, so different in the East from the West, and affecting the keeping qualities of biscuits very considerably, had to be studied along with other most important items, such as the prejudice of many people, even Indians themselves, against foodstuffs manufactured in

India, and the susceptibilities of those whose religious convictions compelled them to be certain that what they were eating was in no way contrary to their beliefs

" In this respect it has been found that India is in a particularly good position to supply virtually all the ingredients required Indian flour, sugar, and butter are as good as any produced in any other country in the world Practical experience has proved, however, that the last-named of these ingredients, butter, is not a satisfactory fat for biscuit-making purposes, especially when used entirely by itself For some years past, therefore, it has been necessary to carry out a considerable amount of research and experimental work in order to find a suitable fat of vegetable origin In the case of the Britannia Biscuit Co, Ltd, this has been done, and they are in the unique position of being able to assure their clients that in the manufacture of their biscuits no fat whatsoever is used, except pure table butter, and odourless and taste

less solidified oil which they guarantee to be purely ' vegetable origin ' "

Three years ago the Britannia Biscuit Co, Ltd, started at their factory a department for the preparation of Bengal arrow root, fruit jellies, jams, and chutneys, all made from Indian ingredients This branch has a yearly increasing trade, and the company's productions are being sold in many of the large West-End shops in London

The company's factory at Bombay, which was started in 1925, is on exactly similar lines to the original factory at Dum Dum The necessity for the second factory was due to the long distances which have to be covered in India in getting the production of an industry of this nature from the place of manufacture to the consumer The managers and foremen at both establishments are either men trained in the large biscuit factories in Europe or Indian assistants who have been trained by them

W LESLIE and CO, Hardware and Metal Merchants, 19, Chowringhee Road

THE name of W Leslie and Co is associated with an enormous variety of requirements for the factory, the plantation, the office, and the home, and their premises form one of the magnificent buildings which make Chowringhee Road one of the finest and most impressive thoroughfares in the East Leslie House, as the establishment is called, was erected in 1912 for Mr William Leslie, the founder and senior partner of the firm of W Leslie and Co It has a frontage of 47 feet, extends back 344 feet, is upwards of 80 feet high and its four floors, connected by electricity, have a combined area of 55,800 feet

A stranger walking along the broad pavement of Chowringhee Road is apt to pass Leslie House without being aware of it, for unlike department stores in Great Britain and elsewhere it has no window display, and its entrance is shielded by a fibre arrangement for keeping the interior cool, so that when the visitor steps from the outside glare into the welcome shade of this remarkable hardware emporium, the pleasure of transition will be followed by surprises, if the uncommon resources of the establishment are inspected Nowhere in Asia is there a larger and more varied assortment of general ironmongery, hardware, builders' requisites, estate supplies, agricultural machinery, tools, electrical fittings, household requirements, office equipments, sporting goods, etc, than is there arranged in a system which enables the firm to tell instantly the quantity of any particular goods they have in hand The great stock includes innumerable inventions and devices which relegate preceding ways and means to the limbo of the obsolete Few persons inspecting it will not find some article of ingenuity and utility that will solve problems of economy and adaptability in a way previously regarded as impossible The

building and its adjoining stores, also Leslie property, cover about 2½ acres of land

In the Tangra district, on the banks of the canal, Messrs W Leslie and Co have a general engineering works, where about 300 men are employed, aided by a plant of up-to-date machinery driven by electricity The operations there are exceedingly comprehensive, and embrace the manufacture of many kinds of articles in connection with plumbing and sanitary engineering, blacksmiths' and foundry work, constructional and jobbing contracts, etc

The concern, which gives employment to 500 persons, including 40 Europeans, was founded in 1890 by Mr William Leslie, a native of Berwickshire and a member of an old and distinguished Scottish family After thirteen years' service with one of the hardware firms in Calcutta, he started in business for himself in a small way His venture proved very successful, and necessitated new and larger premises from time to time, until it served practically all India with its multifarious supplies

During the Great War, Messrs W Leslie and Co rendered valuable aid to the Government by the very satisfactory manner in which they carried through large and important contracts in India and elsewhere for goods that could not be obtained except through their agency Furthermore, Mr William Leslie placed his handsome new building at the disposal of the Government and it was used accordingly as The Munitions Department

A few years ago Mr William Leslie took into partnership his sons, Mark and Kenneth, also Mr John F Greig The telegraphic address of the firm is " Metals," Calcutta, and the codes used by them are A1, A B C 5th edition, and Engineering

HOLMES, WILSON and CO., LTD , General Merchants and Managing Agents, Norton Buildings

The business of Messrs Holmes, Wilson and Co , Ltd , was started in January, 1915, by Messrs C H Holmes and A D Wilson in partnership, and had as its nucleus the purchased goodwill of the old-fashioned merchant firm of J H Elliott and Co , Ltd , established in India since 1874. That firm had carried on an import business in metals and hardware until the outbreak of the Great War, when, owing to the difficulty in obtaining the necessary finance for its operations, it was forced into liquidation.

In 1918 Messrs Holmes, Wilson and Co were formed into a limited liability company. Since that time their business has expanded year by year, and to-day it exerts no small influence in the commerce and industry of Calcutta.

They were the original promoters of the Britannia Biscuit Co , Ltd , which is now the largest biscuit manufacturing concern east of Suez, and is described on pages 91 and 92. In 1919 they floated the Britannia Building and Iron Co , Ltd , described on pages 90 and 91. They act as managing agents of the Star Iron Works, Lilooah, where about 400 people are employed in the manufacture of cast-iron rice bowls and other castings. That establishment is at present turning out between 7,000 and 8,000 rice bowls a day, as well as castings for Government and various Municipalities.

Messrs Holmes, Wilson and Co , Ltd , also promoted the Fraserpet Fibre Co , Ltd , and are its managing agents. That company came into existence in 1919, and has an estate of some thousand acres, about half of which is planted with sisal. Attached to the estate is a modern decorating factory.

Other sole agencies held by the company are those of Messrs Rutherford and Kay, whiskies, wines, etc , Anglo Enamelware, Ltd , enamelled holloware, Archibald Kenrick and Sons, Ltd ,



NORTON BUILDINGS CONTAINING
OFFICES OF HOLMES, WILSON and CO., LTD.

iron-founders , Commercial Cable Co , Ltd , London and New York.

Insurance forms an important section of their business, and they are the principal local agents for the Prudential Assurance Co , Ltd , as well as local agents for the Atlas Assurance Co , Ltd.

The directors of the company are Mr Charles H Holmes, Mr A H Clarke, and Mr J H Simpson.

JOHN THOMPSON (WOLVERHAMPTON), LTD , Boiler-house Plant Manufacturers and Engineers, etc , 4, Fairlie Place

No name is better known throughout the world in connection with the manufacture of boilers than that of John Thompson of Wolverhampton. The great interests in connection with that celebrated name had their nucleus in the unpretentious little business which was started at Wolverhampton by Mr William Thompson upwards of 100 years ago, when the wonder of the steam engine was still fresh and its utility only in its primary stages in comparison with the vast development which it was destined later to achieve. Mr William Thompson specialised in the manufacture of boilers, and his successors through the intervening decades have followed his example with such ability and enterprise that they are to-day amongst the leading boiler manufacturers in the world. In modern industry specialisation is a great and wise policy, and the benefits accruing from it are impressively shown by the extraordinary variety

and capacity of the John Thompson boilers, which embrace every possible type, from the small vertical and Cornish designs to huge water-tube boiler installations in units up to 200,000 lbs evaporation per hour and at the exceedingly high present day working pressures. Everywhere in the world the famous John Thompson boilers are sustaining important industrial undertakings that employ millions of people and gain satisfactory dividends for invested capital. John Thompson's name is so famous wherever there is machinery that it has become a synonym for boilers, as other celebrated names are for foods and liquors, for medicines and soaps, etc , John Thompson—so essentially British. No wonder Wolverhampton is proud of it and what it stands for there, where the firm contribute so largely to local economic welfare and progress.

Messrs John Thompson, Ltd , Wolverhampton, have developed their interests so much that

they now control the subsidiary companies known as

John Thompson Water Tube Boilers, Ltd —Thompson Patent Vertical straight tube boilers, bent tube boilers, horizontal staggered header and horizontal straight header boilers, and complete boiler house plant

John Thompson (Dudley), Ltd —Thompson self supporting and parallel steel chimneys, tanks, stills, and receivers of all descriptions and sizes

John Thompson Motor Pressings, Ltd —Motor chassis, big diameter, mild steel riveted or welded pipes

John Thompson Gas Developments, Ltd, which is demonstrating vast potentialities in India in connection with the solidification by the Maxted process of hydrogenation of vegetable oils for export

Kennicott Water Softener Co, which softens water for industrial purposes, chiefly for railways, locomotives, power stations, and textile establishments, and thus greatly reduces working costs and troubles

John Thompson Bacon Windows, Ltd —Steel window frames and casements

Metallisation, Ltd —Metal spraying plant for spraying all metals

All these companies are in the Wolverhampton district, and, in addition, many other allied interests and branches throughout the world tes-

tify to the great importance and influence of the business in question in connection with universal industrial activities

In December, 1921, a branch was opened at Calcutta for the combined interests of Messrs John Thompson (Wolverhampton), Ltd, and their associated companies, and that branch is under the management of Mr H E Corn, the company's manager for the Middle East, who is making its influence felt in connection with its wide sphere of activities in India. As an example of this reference may be made to the order recently received from the Tata Iron and Steel Co, Ltd, Jamshedpore, for the largest singular boiler plant ever placed in India, comprising, as it does, ten "John Thompson" patent straight water-tube boilers complete with superheaters, air-heaters, fans, engines, etc, etc. Each of the boilers is 10,660 square feet heating surface, to work at a pressure of 225 lb per square inch, and is to be fired with blast furnace gas.

The company's telegraphic address is "Water tube," Calcutta, and the codes are A B C 5th and 6th editions, Bentley's, and private

G McKENZIE and CO (1919), LTD, Motor Engineers and Importers, 18, Park Street

THE fact that the business of Messrs G McKenzie and Co (1919), Ltd, gives employment to upwards of 1,500 persons indicates right



PREMISES OF
G McKENZIE and CO (1919), LTD,
PARK STREET

away its prominence and importance in the automobile trade of the Indian Empire. A little of the why and the wherefore of that distinction is

imparted by the exhibition in the company's large and handsome showroom in Park Street, but a very much more impressive demonstration of what they do and how they do it, as well as the vehicles towards which their enterprising activities are directed, is afforded at their works, occupying about four acres, in Lower Circular Road, where motor vehicles of every description and in all conditions are turned out in specialised ways that are the result of the knowledge and experience accumulated since the first internal combustion engine dwarfed the world and influenced human affairs beyond computation. When a car meets with a disaster that transforms it from a powerful and swift shining thing of vibrating joy and utility into a mass of wreckage, Messrs G McKenzie and Co (1919), Ltd, can speedily restore it to its pristine state, and sometimes even make it very much better than ever it was. All details of the equipment of the works are the subject of close scrutiny and study, and anything not up to standard is immediately discarded for something better. The firm build vehicle bodies of all kinds, and, indeed, there is nothing pertaining to the motor trade in which they do not engage with manifest enterprise and ability.

Messrs G McKenzie and Co (1919), Ltd, are sole agents in India and Burma for the sleeve valve engine cars of Willys-Overland, Inc Toledo, Ohio. The sleeve-valve engine is a distinctive and unique development in the construction of the internal combustion gasoline power plant. Its origin came at a time when the present requirements which are put upon an

automobile engine were first making themselves manifest—the demand for power and simplicity, quietness and efficient performance. The story of its invention and subsequent adoption and development is epochal in the history of modern transportation. England was the first to adopt the sleeve-valve engine, conceived by an American engineer, proved by tests conducted under the auspices of the Royal Automobile Club of Great Britain and similar organisations in other foreign countries. In these trials the Knight type of engine proved its superiority incontestably. Its acceptance by the most famous of European builders attracted the attention of American manufacturers and resulted in its adoption in 1914 by Mr John N Willys, President of Willys-Overland, Inc., Toledo Ohio. Since then it has been continued as a standard power unit by this organisation, who are now the largest builders in the world of Knight-engined automobiles.

Messrs G McKenzie and Co (1919), Ltd, are also agents for the famous Federal and International trucks and the Royal Cord tyres.

The business was started in 1906 at Rangoon under the name of G McKenzie and Co, and kept pace with the increasing development of the motor-car trade. In 1919 the firm was converted into a limited liability company under its present name, and in 1923 its sphere of activities was extended to India. The company was reconstructed as from January 1st, 1925, when the head office was transferred to Cawnpore, branches being now established at Lucknow, Delhi, Agra, Lahore, Rawalpindi, Peshawar, Bombay, Rangoon, Moulmein, Thaton, Yenangyoung, Mandalay, as well as at Calcutta.

The General Manager is Mr G M Paris, who attends to the business at Calcutta. The telegraphic address is "Oland" and Bentley's code is used.

"STATESMAN," LTD, 6, Chowringhee Road

THE *London Daily Telegraph*, in a recent series of articles on India, referred to *The Statesman* as being in the forefront in the long and eventful history of Indian journalism, and detailed its story as follows: Founded upwards of fifty years ago by the late Robert Knight, a brilliant statesman, economist, and litterateur, who is rightly styled the father of Indian journalism, the paper quickly became famous as a leading exponent of liberal thought towards the people of India.

The independent attitude set by its founder and first editor, which secured for it even in its early and not very flourishing years an influence out of all proportion to its circulation, has ever since been maintained.

After the death of their father Mr Knight's sons, who had been closely associated with him in the enterprise, devoted unusual editorial and administrative aptitudes to the development of the paper, especially on the news and business side. The European editorial, reporting and works staffs were greatly strengthened, until in 1907 the proprietors realised that, in order to cope with the increasing circulation, modern printing machinery was needed and, to the astonishment of their contemporaries, proceeded to set up two rotary presses imported from Chicago, together with a battery of linotype machines and complete stereo plant.

It was freely predicted that this enterprise would fail owing to the impossibility, as it was alleged, of training Indian operatives in the handling of complicated machinery and the supposed disastrous climate effect on inking rollers, but the prophecies of failure were falsified.

The change over from old flat-bed presses to fast rotary machines was quietly effected one morning just twenty-one years ago without a hitch, and the

attractive appearance of a well-printed, neatly folded paper, opened up a new era in Indian journalism, and went far to hasten the growth of a circulation never dreamt of as attainable in India. Shortly afterwards a page of illustrations was added as a regular feature of the paper, and to ensure good reproduction an up-to-date process department was established, equipped with all the latest devices, and placed under the direction of European experts. Its pictures went far during the War to create a new reading public for the *Statesman*.

One of the difficulties with which the *Statesman* had to contend in its bid for wider circulation was to find a cheaper and more elastic means than the postal service for reaching the scattered European population in a country where stationers and other vendors of newspapers do not exist, or are to be found only in a few of the principal towns. The practice of establishing cash sale agencies throughout the mofussil was adopted and proved to be so satisfactory a solution of the problem that the method has since found many imitators in the Indian Press. As a result, the *Statesman* has established a regular sale for itself from Quetta, in the extreme west of India, to Dibrugarh (Assam) in the East, and from Delhi and Simla in the North to Bangalore in the South.

Great as has been the commercial success of the *Statesman*, however, its services to the State as an organ of public opinion have been not less conspicuous. In days when it was a reproach to be "A Friend of India" it exposed the faults of the Government with the same vigour as it has since shown in attacking the excesses of those Indian politicians who refuse to abide by Constitutional aims and methods.

STEWARTS and LLOYDS, LTD ,
Manufacturers of Wrought-iron and Steel Tubes for all Purposes, 6, Royal Exchange Place

WHEN national business achievements are compared, Scotsmen may refer with pardonable pride to the vast combination of industrial undertakings comprised by the renowned firm of Stewarts and Lloyds, Ltd, who have encircled the globe with their activities, and well demonstrate the pre-eminence of Scottish aptitude in great engineering accomplishments. Their head office is in Glasgow, at 41, Oswald Street, the busy thoroughfare that runs from Argyle Street down to the Broomielaw quays, and from the Clyde River, as well as from elsewhere, are despatched by the firm in huge quantities materials that have advanced civilisation and its benefits in all parts of the world, amidst strange peoples and in every condition, from prehistoric wildernesses to the pulsating traffic arteries in the world's leading cities.

The authorised capital of the various undertakings of Messrs Stewarts and Lloyds, Ltd, amounts to £6,800,000, and upwards of 50,000 persons are on their pay rolls. They control the following:

TUBE WORKS—British Tube Works, Coatbridge, Lanarkshire

Calder Tube Works, Coatbridge

Culder Coil Works, Coatbridge

Clyde Tube Works, Coatbridge

Coombes Wood Tube Works, Halesowen, near Birmingham

Imperial Tube Works, Airdrie, Lanarkshire

Phoenix Tube Works, Rutherglen, Glasgow

Tollcross Works, Tollcross, Glasgow

Vulcan Works, Motherwell, Lanarkshire

COLLIERIES—Kilnhurst Collieries, Rotherham, Yorkshire

Jeaviston Colliery, Motherwell, Lanarkshire

BLAST FURNACES—North Lincolnshire Iron Co, Ltd, Scunthorpe, Lincolnshire

Lloyd's Ironstone Co, Ltd, Colby, Northamptonshire

Alfred Hickman, Branch of Stewarts and Lloyds, Ltd, Spring Vale, near Wolverhampton

STEEL FOUNDRY—Sun Foundry, Coatbridge, Lanarkshire

STEEL WORKS—Staffordshire Steel and Ingot Iron Works, Bilston, Staffordshire

Clydesdale Iron and Steel Works, Mossend, Lanarkshire

TOOL WORKS—Climax Tool Works, Airdrie, Lanarkshire

Messrs Stewarts and Lloyds, Ltd, have branches and agencies all over the world. They opened in 1907 their Calcutta branch, under the direction of Mr W. Wilson, the company's General Manager for India, Burma, and Ceylon, who has been in their employ for some thirty years.

Amongst the many important contracts fulfilled by Messrs Stewarts and Lloyds, Ltd, in the Orient, mention may be made of the Tansa Water Main, 5 feet in diameter, at Bombay, 25 miles of 24in pipes for the Colombo Waterworks, 5 miles of 42in pipes for the Rangoon Waterworks, and 33 miles of 30in pipes for the

Singapore Waterworks, besides schemes at Gaya, Jubbulpore, Bangalore, Benares, Lahore, Maymyo, Akyab, Srinagar, Darjeeling, Simla, Patan, Negapatam, Salem, Mandalay, Berhampore, Vizianagram, etc.

With the view of overcoming delays in obtaining supplies from Great Britain, the firm leased ground in Kidderpore, on which have been built extensive warehouses, with road, rail and river communications, thus providing excellent facilities for meeting the requirements of railway companies, jute mills, collieries, tea gardens, and other industries. For that purpose large stocks of all the necessary tubes and accessories are kept, while for special needs a well-equipped machine-shop and smithy is attached to the premises.

The manufacture of steel tubes for water distribution mains is a branch of industry to which Messrs Stewarts and Lloyds, Ltd, have paid particular attention. These are much lighter than the heavy cast-iron pipes formerly used. They are made in lengths up to 50 feet, in any diameter up to 6 feet, are unbreakable, and combine all the essentials for India, being cheaper in first cost, easier to handle, and with fewer joints to be made than is the case with cast iron pipes. The numerous water-supply schemes throughout India in which they have been installed testify to their efficiency. High-pressure mains for hydro-electric power installations are also a special feature of the firm's manufactures. Tubes are more commonly identified with water, gas, compressed-air, and steam installations, but Messrs Stewarts and Lloyds, Ltd, have shown that they can be used for a great many other purposes, and in architectural work they are an improvement on the massive brick pillars or unsightly steel sections which are much too common in buildings. Steel tubes are equally suitable for railway signal-posts, tramway, electric light telephone, and telegraph poles.

Messrs Stewarts and Lloyds, Ltd, are makers of wrought-iron and steel pipes of every description by the lapweld, butt-weld, and weldless processes with the necessary fittings, tubular steel transmission towers, derricks, davits, and ships' masts, and are also makers of Siemens-Martin steel plates, steel castings, zinc sheets, zinc boiler plates, Ashford's patent tube well strainers, and "Victaulic" joint tubes. The latter can be fitted in a moment by unskilled labour, couple the pipes, yet is flexible under pressure, is interchangeable on all makes of pipes, is really leak-proof, needs no exact aligning of pipes, and lowers installation and upkeep costs. Hundreds of miles of tubes fitted with this type of joint have been supplied during the last five years. The firm's telegraphic address is "Tubemakers Calcutta."

GLADSTONE, WYLLIE and CO , Merchants and Agents, 5, Council House Street

The Gladstone family has been connected with the commerce of Calcutta for many decades. Sir John Gladstone, Bt, father of the late Right Hon Ewart Gladstone, the celebrated Premier, not only sent out to Calcutta in 1820 Mr F Gillanders, who founded the firm of Gillanders, Arbuthnot and Co, but also in 1841 sent out to the rapidly developing city on the Hooghly River Mr James Wyllie and Mr Andrew Hay, who founded the firm of Gladstone, Wyllie and Co. The latter opened their first offices in 1846 in Mangoe Lane, but removed to more commodious premises at 101, Clive Street, where they had large godown accommodation, and did an important business as importers and exporters, their principal imports being Manchester goods and yarns, salt, metals, wines, and paints, while business was done on a large scale in all Indian produce, particularly rice, of which immense quantities were shipped to the West Indies, silk, indigo, and sugar.

The firm became managers of the Clive Steam Tug Co in the early sixties, and four paddle tugs, then the most powerful in the world, were built for it by the Dennys of Dumbarton. They were afterwards replaced by screws, and, so long as ships were mainly sailers, the company was very prosperous. The whole fleet was chartered by the Government during the Abyssinian War of 1868 for the conveyance of troops and stores, when Mr Wyllie's brother, Surgeon-General David Wyllie, was the Senior Medical Officer in charge of the expedition.

Under the auspices of the firm, the Clive Jute Mills were erected, being amongst the earliest mills on the River Hooghly.

Branch offices were opened at Rangoon and Bombay, the former being under the management of Mr W Strang Steel, who afterwards founded Messrs Steel Brothers and Co. These branch offices continued until 1893, when the firm decided to concentrate on the Calcutta business, and transferred the offices at Rangoon and Bom-

bay to the partners who were then in charge of them.

Messrs Gladstone, Wyllie and Co are importers of piece-goods, for which they have a godown at 23, Canning Street. Piece-goods have always been an important department of the business, and it may be mentioned that during the reign of King Theebaw the firm, through their Rangoon branch, supplied most of the silks for the Burmese Court.

In 1911 they removed from Clive Street into their present premises at 5, Council House Street, which had just been vacated by the Chartered Bank. There have been, of course, many changes in the personnel of the firm, and the partners from time to time have included men prominent in public affairs. The present partners are Mr R Bazley, Mr A McD Eddis, and Mr K J Nicolson. The important position of banian to the firm has continued in the same family for an unbroken period of about 90 years, which doubtless constitutes a record. The first banian was Ramchand Seal, and the present holder of the office is his great-grandson, Deno Nath Seal, of the firm of Mohanlal Seal and Co.

Messrs Gladstone, Wyllie and Co have been agents for Lloyds since 1862, they are also agents for the following:

Ellerman's City and Hall Lane of Steamers
Ellerman & Bucknall SS Co, Ltd
Salvage Association, London
The Board of Underwriters of New York
The National Board of Marine Underwriters
Northern Assurance Co, Ltd
Maritime Insurance Co, Ltd
Railway Passengers' Assurance Co, Central Insurance Co of New York
Tokio Marine and Fire Insurance Co Ltd
Hartford Fire Insurance Co, Hartford
Connecticut and Phoenix Assurance Co, Ltd
Calcutta Bone Mills, Ltd
Champisuri Tea Co, Ltd

The telegraphic address of Messrs Gladstone, Wyllie and Co is "Gladswill," Calcutta, and they use all the standard codes.

BECKER, GRAY and CO (CALCUTTA), LTD , Hong Kong House, Dalhousie Square

ANY endeavour to present the commercial activity of Calcutta in as interesting and varied a manner as possible is met with one outstanding characteristic inseparable in that respect from local conditions, namely, the fact that most of the principal firms can be classed as general merchants, and what is applicable to one may truly be said of all. Nevertheless, when investigation is made of the various concerns which may be selected for review, it is found that each has an individuality of its own. Messrs Becker, Gray and Co (Calcutta), Ltd, appear to be engaged in much the same way as their contemporaries. Their business is no new undertaking confronted with the haphazard chances of unproved capacity, but has weathered many a commercial storm

and has seen many changes since its commencement in Calcutta in 1894.

The firm deal largely in all kinds of Indian produce, especially jute, gunnies, shellac etc, and their shipments go to practically all parts of the world. They are also importers of sugar.

In 1920 the firm was reconstructed, and its original name of Becker, Gray and Co changed to Becker, Gray and Co (Calcutta), Ltd, with Messrs Becker, Gray and Co (London), Ltd, 34, Fenchurch Street, London, E C, as its European correspondents. The board of directors comprises Sir John Bell, Mr P H Browne, Mr J S Henderson, and Mr L de Bretton. The telegraphic address is "Volleyed," Calcutta, and all the standard codes are used by the company.

**J MACKILLICAN and CO , Merchants and Agents,
Grosvenor House, 21, Old Court House Street**

THE province of Assam shares with China the distinction of being the home of the tea plant, and Assam and Bengal have for many years occupied an important position amongst the tea-producing countries of the world on account of the large percentage they contribute to the world's total output of tea, and also because of the up-to-date nature of their methods of cultivation and manufacture In 1926 the world's

considerable amount of Northern India tea. Their business was established in 1861, and is now owned and operated by Messrs W H Miles and J Ambler, who have been connected with it since shortly after the death of its founder, Mr James H Mackillican, in 1913

The firm are managing agents of the Laka tooral Tea Co , Ltd , which has 1,209 acres of tea in Sylhet , and the Gairkhata Tea Co , Ltd ,



PICKING TEA IN THE DOOARS

output of tea was 737 million pounds, made up as follows

Northern India	340 millions
Southern India	44 millions
Ceylon	216 millions
China	119 millions
Sumatra	18 millions

737 millions

It will thus be seen that the output of tea in Northern India is more than 46 per cent of the entire world's production, and that fact is interesting and instructive when attention is directed to the firm of Messrs J Mackillican and Co , merchants, and shippers to London of a

with 1,288 acres in the Dooars, secretaries of the Arcuttipore Tea Co , Ltd , 848 acres, in Cachar, agents for The Dooars Tea Co , Ltd , 8,091 acres in the Dooars, The Attabarrie Estate, 708 acres, and The Rupshi Tea Estate, 200 acres, both the latter being in Assam.

Messrs J Mackillican and Co sell a good deal of their tea at the trade auction sales in Calcutta but most of it is shipped by them, as already indicated, to London, whence it is despatched to wholesale and retail merchants throughout the United Kingdom The firm are also agents for the London and Lancashire Insurance Co , Ltd Their telegraphic address is "Phosphates," Calcutta, and the codes used by them are the A B C 5th edition and Bentley's

MARTIN and HARRIS, LTD , Agents for Pharmaceutical Manufacturers, 8, Waterloo Street

EVERYWHERE throughout the Orient and elsewhere in the world are to be found innumerable manufacturers' agents, whose activities cover very wide ranges of productive industry and embrace goods of the most dissimilar character. Such, however, is not the case with Messrs Martin and Harris, Ltd, for instance, who are not interested, in any way, in goods not associated with the pharmaceutical and allied trades, but, so far as the latter are concerned, there is no firm in Calcutta or in the East operating with greater knowledge of and with a keener insight into local conditions and potentialities in relation thereto than this noted house that has its ramifications throughout the Indian Empire, and branches at Bombay, Madras, Rangoon, Karachi, Delhi, Lahore, Amritsar, Colombo, and Singapore.

Importing from the leading manufacturers of such goods in both hemispheres, it can well be understood that the firm's very exhaustive range of supplies embraces everything which knowledge and experience have evolved for the prevention and alleviation of pain and illness, and the enhancement of physical welfare, together with the very great range of toilet articles and perfumery so largely in vogue at the present day.

**CUTLER, PALMER and CO , Wine and Spirit Merchants,
30, Bondell Road and 10, Government Place, East**

In every department of business activity conditions have changed very greatly during recent years. New means and methods have revolutionised old-time standards, and the necessities created by modern competition have in many instances lowered very considerably the ideals and traditions towards which aspiring efforts were formerly directed. The wine and spirit trade, for example, that once was regarded as more in the category of a profession than a department of mercantile activity, had evolved an atmosphere of eclecticism and cultured specialisation rarely, if ever, found in the exemplification of that trade to-day. Here and there about the world are, however, firms typically representative of their old-time predecessors, whose operations were conducted with the dignity befitting the ancient liquors in the cool, dark cellars of those vanished years. Such a firm is that of Messrs Cutler, Palmer and Co, whose name is throughout the Orient a synonym for all that is best in connection with the wine and spirit trade. What club of any pretensions in India, for instance, does not get its supplies from them? Connoisseurs in crowded cities and isolated country places know their name well, and it is referred to with appreciation in many languages. It is a name of many associations, and balls, birthdays, dinners and dances would be flat and dull when considered in relation to Eastern customs and environment without such excellent supplies as those of Messrs Cutler, Palmer and Co.

The firm's city offices in Government Place,

The directors are Mr H G Harris, Mr R D Lemmon, and Mr K B Mistry, who have had long experience of the wholesale pharmaceutical trade.

The firm have been established since 1907. Their telegraphic address is "Rowlette," Calcutta, and the codes used are the A B C 5th and 6th editions, "S and M" Merchants, Western Union, and Bentley's.

Messrs Martin and Harris, Ltd, are agents for

E Merck Germany
Knoll & Co, Germany
United Works for Laboratory Requirements, Germany
Nitsche and Gunther, Germany
The Jetter and Scheerer Co Germany
De V Biss Manufacturing Co, U S A
Comrad Weber & Co, Germany
Bindeongsche Kimmernbrick, Java and Holland
N v Wulffing & Co, Holland
Friederick Stearns & Co, U S A
Rouie Betrand Fils, France
Genitoson, Ltd, England
Wm Hay, Ltd, England
The Orlene Co, England
Fissett & Johnson, Ltd, England
Alfred Bishop, Ltd, England
Iron Jelloid Co, Ltd, England

East, have that air of conservatism which is eminently characteristic of the premises of the Victorian vintners. It is, however, at their large premises in Bondell Road that the firm's specialisation and resources in wines and spirits are demonstrated. These premises, built specially for them and completed in 1923, occupy an area of 120,000 square feet, and are admirably adapted for their purpose.

The unenlightened individual, whose superficial consideration of wines and spirits is overshadowed altogether by the one indisputable fact that they are alcoholic, would not probably find any interest in surveying the impressive display formed by the stock of this well-known firm. Every kind of bottle, and almost every name and seal associated with the wine and spirit trade, are to be seen there, including some rare old liquors that came into existence when the world was not so disillusioned as it is now, and the dust on the bottles that contain them is not the subterfuge of artificiality but the impress of the long years that have passed since they were filled. Cutler, Palmer! How the name will recall to many the happy days and still happier nights when the visions splendid illuminated the perspective with gladness and glory, and the dull drab details of weary routine and unfulfilled hopes vanished through the inspiration from old vintages of sunny vineyards and mellow spirits of far-off mountains and glens. Essentially and wholly wine and spirit merchants, Messrs Cutler,

Palmer and Co are not concerned with any other merchandise. They are specialists in the supply of that which "maketh glad the heart of man," and have been so engaged longer than any other similar firm in the East.

As indicated elsewhere in this volume, the firm's business was established in 1815 by Capt Frank Cutler, of the Royal Navy, who had been captured in a sea fight by the French, and was imprisoned at Bordeaux, whence he escaped, it is said, in a wine barrel. During his imprisonment there he had gained considerable knowledge of the local wine trade, and on his return to England he utilised that knowledge by starting in trade as a wine merchant, with very gratifying success. His business developed greatly, and

**JOHN KING and CO, LTD, Engineers, Ship-builders, Founders and Contractors,
40, Strand Road, Victoria Engine Works, Howrah**

THE number of industrial and commercial undertakings in Calcutta which were founded by Scotsmen is certainly very noteworthy. Mr John King, for instance, who established the business of Messrs John King and Co, Ltd, in 1865, was a native of Paisley, and arrived in India when a new era was dawning in connection with the development of railways, the bridging of rivers, the construction of piers, jetties, pontoons, and the building of steamers and other vessels. The excellent opportunities thus presented to his engineering knowledge and skill were duly taken advantage of, and soon the undertaking which he had started in a small way underwent great expansion and contributed in no small measure to the engineering and ship-building facilities of Calcutta.

After the death of Mr King in 1890, the firm was formed into a limited liability company, and its development proceeded unabatedly, eventually resulting in corresponding large additions to the firm's premises, which comprise the Victoria Engine Works, Howrah, occupying an area of about ten acres, and large repairing shops near the Kidderpore Docks.

The work undertaken by Messrs John King and Co, Ltd, is of the most comprehensive character. As ship-builders they turn out steamers, launches, barges, ferry boats, and pontoons. The majority of the steam launches made by them are fitted with engines designed and built in their Howrah workshops, which are equipped with modern and powerful machine tools of every description. In the foundry castings up to 20 tons in weight are made. Indeed, nothing seems lacking in the Victoria Engine Works that can contribute in any way to the perfection of the work there performed and its execution at the minimum expenditure of time and labour, thus reducing cost to the lowest possible degree.

The branch works at Garden Reach have been for many years utilised greatly in connection with overhauling and repairing of vessels of all kinds, and during the Great War the service

in course of time branches of it were established at Bombay, Madras, and Calcutta, etc. In 1831 the concern assumed its present name when Mr C V Palmer became a partner in it. That gentleman died in 1880, and was succeeded by his son, Mr A C V Palmer, who passed away in 1924. The present partners are Mr F. G. Wallis Whiddett, who has been in the business for about forty years, and Mr J. H. Witchurch, who has been in it for about sixteen years. Both attend to the firm's interests at their London office at 3-4, New London Street, E C.

The manager of the Calcutta branch is Mr Owen Hearn. The firm's telegraphic address is "Companion," Calcutta, and they use the A B C 5th edition code.

rendered by John King and Co, Ltd, in the fitting out of numerous transports and in marine engineering of every description is not the least of their many notable achievements. Many are the jetties, bridges, roofs and buildings of all kinds that testify to their ability as general constructional engineers. They employ about 2,000 persons, including many European managers and foremen.

Behind the company's offices at 40, Strand Road, are their commodious godowns, accommodating large stocks of all kinds of mill and colliery requirements, boilers, engines, machine tools, wire ropes, chains, anchors, and all the many other things necessitated by the wide range of the business.

Messrs John King and Co, Ltd, are managing agents of Steel Products, Ltd, Kidderpore, which was established in 1917, employ some hundreds of persons, and specialises in the production of steel furniture, steel office equipment, steel shelves, etc. They are also agents for

Alexander Anderson & Sons, Carfin Boiler Works, Motherwell, Glasgow

N Hingley & Sons, Dudley

Morgan Crucible Co, Ltd, Battersea Works, London

The Magnolia Anti Friction Metal Co of Great Britain, Ltd

The British Steel Piling Co, Ltd

J W Brooke & Co, Ltd, Lowestoft

Greens Tweed & Co, New York

Penberthy Injector Co, Detroit, U S A

Arthur Balfour & Co, Ltd, Sheffield

Excelsior Wire Rope Co, Ltd, Cardiff

Lamont & Co, Paisley

Coil Clutch Co, Ltd, Johnston, Scotland

D Mitchell & Co, Ltd, Keighley

Hughes (Oldham), Ltd, Oldham

J & W Tinto, Ltd, Glasgow

Goldie's Patent Smoke Preventer and Coal Saver

Andrew's Patent Balance Slide Valves and Hangers

and Co (Engineers), Ltd, Croydon

The managing directors of Messrs John King and Co, Ltd, are Mr Millar M King and Mr G A King, sons of the founder of the concern.

The telegraphic address is "Victoria," Calcutta, and the codes used are the A B C 5th edition and Bentley's

J THOMAS and CO , Jute, Tea, and General Produce Brokers, 8, Mission Row

NOTWITHSTANDING the vast transformation which has been effected in Calcutta during recent years, there are still left some interesting old places reminiscent of the distant past, such, for

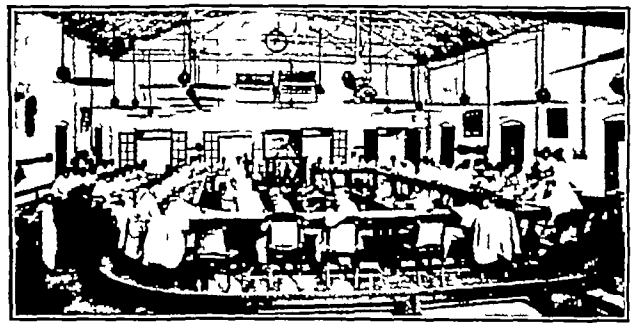


**HOUSE WHERE GENERAL CLAVERING DIED,
NOW OCCUPIED BY J THOMAS and CO**

instance, as the fine old mansion and grounds, covering about three acres, occupied by Messrs J Thomas and Co, the well-known produce brokers. On the left-hand side of the gate, on the outside, is a marble tablet bearing the following words "This is the house in which General Clavering, member of the Council of Warren Hastings, died." On the other side of the gate is another marble tablet bearing in sharp mercantile contrast the following "New Mart J Thomas and Co."

Mr R Thomas, founder of the firm, arrived in Calcutta between the years 1835 and 1840, and the first records of the business show that it was in existence in 1851 under the style of Thomas, Martin and Co. Thereafter the name was altered several times, and assumed its present form in 1866. The names of long dead merchants are not interesting, it is what they did that counts. The business under review was devoted entirely in its early years to the indigo trade. Indigo was a product of North Behar long before the advent of the British, but its cultivation by

European methods was not of much account until the close of the eighteenth century. Thereafter it developed greatly and at Messrs J Thomas and Co's advent formed one of the chief exports of India. So it continued until 1897, when it received its death warrant from the introduction of synthetic indigo to the markets of the world. The discovery of indigotin, obtained from coal tar, has largely superseded the use of vegetable indigo in dyeing, and is more uniform in strength. Thus it came about that Messrs J Thomas and Co, while transacting all the business that could be done in the steadily diminishing indigo trade, became general produce brokers, with special reference to tea, jute, and gunnies. They became tea brokers in the early sixties of last century, and conducted the first tea sale ever held in



J THOMAS and CO'S TEA SALEROOM

India. Northern India produces more than 46 per cent of the entire world's production of tea, and Messrs J Thomas and Co. sell, as brokers, about half of that vast quantity. They are similarly very largely engaged in connection with jute and general produce, and the scenes in their premises are eloquent of the wide scope of their operations. Their telegraphic address is "Nilhat," Calcutta.

BIRKMYRE BROS , 6, Clive Row

The story of the business of Messrs Birkmyre Bros goes back to 1874, when Messrs William and Adam Birkmyre established in Lyndoch Street, Greenock, under the name of the Greenock Sacking Company, a small jute works driven by a water turbine. Foreseeing the development and future importance of the jute manufacturing industry in Bengal, they dismantled their Greenock establishment, and, transferring the entire machinery to Calcutta, used it in the erection of a new mill in the populous district of Rishra, situated on the western bank of the Hooghly River, two miles below Serampore. The new works were named the Hastings Jute Mill from the circumstance of the land having formerly belonged to Warren Hastings, as is evidenced by two leases, forming part of the

Proprietors of Hastings Mill, Rishra

title-deeds, which bear his signature and seal in a perfect state of preservation.

On the south bank of the Champa Khal stood Rishra House, where Warren Hastings and his wife used to stay from time to time. It was surrounded by a brick wall, the western portion of which was lined with a row of mango trees, said to have been planted by Mrs Hastings. When Hastings retired he sold the house and adjoining land, 136 bighas, receiving twice as much as he paid for it. The old building is now used as the manager's bungalow.

Messrs William and Adam Birkmyre associated with them, in the new undertaking, their brothers Henry and John, and founded at Calcutta, simultaneously with the starting of the new jute mills, the now well-known firm of Birkmyre Bros.

The Hastings Jute Mill prospered from the start. In 1893 the plant had been increased to over 500 looms, with other machinery in proportion. Electric lighting was in that year installed, and from 1894 to 1904 the works were run at night by artificial light, the average working time being about 22 hours per diem. The mills were the first undertaking of the kind to be equipped with electric light and the only one that attempted working at night, but labour difficulties occurring in 1904 compelled the cessation of the latter practice. Thereafter the Hastings Jute Mills were considerably enlarged, and the old steam-power engines were replaced by electric generators driven by steam turbines giving about 4,000 h p. The plant to-day comprises 1,077 looms, with the relative preparing, spinning, and finishing machinery, all electrically driven, and giving employment to about 9,000 persons.

In addition to the manufacture of jute there is a separate department at Hastings Mill for making up all kinds of canvas and waterproof paulins, kit bags, and other military equipment, the well-known "Birkmyre" patent waterproof canvas being now largely used by the Indian Government for military, postal, and other purposes,

railways, and private concerns. Connected with this department is special machinery for weaving and preparing "Hastings" hair and cotton belting, which commands a ready and steadily increasing sale throughout India.

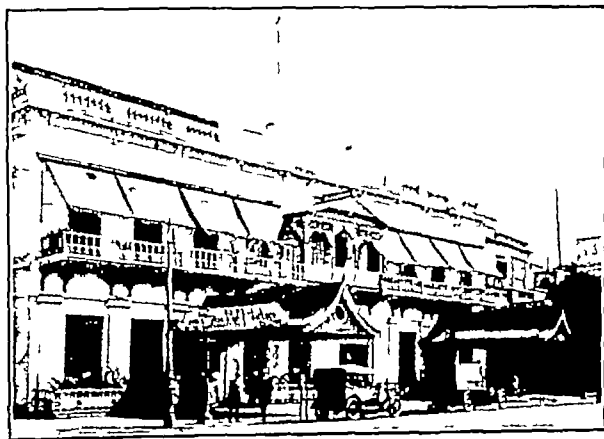
The original constitution of the firm remained unchanged until 1890, when Messrs William, John, James, and Archy Birkmyre, sons of Mr Henry Birkmyre, senior, and Mr Henry Birkmyre, son of William Birkmyre, junior partner, and Mr John Finlay, were admitted partners. Messrs Henry and William died in 1900, Mr Adam in 1906, and Mr John in 1910. After the death of Mr William in 1921, the partnership was reconstituted in 1922 with the following partners—Sir Archy Birkmyre, Bart, C B E, Mr John Birkmyre, Mr J. Finlay, Mr Henry Birkmyre (son of Sir Archy), and Mr Henry (son of Mr John Birkmyre).

Messrs Birkmyre Bros' telegraphic address is "Birkmyre," Calcutta, and their codes are Western Union, Bentley's, A B C 5th edition, A 1, and private. They are agents for the Gourock Ropework Co's canvas, twine, Birkmyre's waterproof cloth, and Dick's original Balata belting.

FREDERICO PELITI, Confectioner and Court Caterer, 11, Government Place

CALCUTTA is noted for its gaiety, to which Peliti's famous restaurant is a contributor. Situated in Government Place, opposite to Government House, its external as well as internal appearance

amongst people in Calcutta who can appreciate the combination of art and utility therein exemplified in every detail. The pleasure of lunching, dining, or having afternoon tea at Peliti's is



PELITI'S RESTAURANT

is in keeping with its excellent surroundings. The ground floor comprises a nicely appointed café and an attractive department for all kinds of delicious confectionery, groceries, wines and spirits, representing a very comprehensive assortment of the best-known European and American delicacies, in which the choicest Italian products predominate, for Mr Peliti is of that nationality, and is an authoritative connoisseur in things eatable and drinkable.

It is, however, the spacious sections on the upper floor that have made Peliti's so popular



BALLROOM, PELITI'S RESTAURANT

greatly enhanced by the delightful comfort and goodness of everything pertaining to the service, menu, and all those innumerable little things that are never absent in any first-class restaurant. The tables covered with spotless linen, the glittering spoons, cutlery, and tableware, the charming decorations, especially the coloured electric lights over each table in the form of baskets of fruit and flowers, and the excellence of the orchestra all combine to make a visit to Peliti's very pleasurable. There is dancing at Peliti's every evening between tea and dinner all the year.

round. In the hot season Thursdays and Saturdays are the nights appointed for dinner dances, but in the cool season all the dinners at Peliti's are dinner dances. On gala nights the scene there is exceedingly joyous. A highly appreciated feature of Peliti's is the thoughtful care manifested for the comfort and convenience of ladies, for whom there is a charming suite comprising drawing-room, bath and toilet rooms, etc., the entrance to which is in the nicely arranged staircase that leads with commendable privacy straight from the thoroughfare to the upper floor.

The business is the oldest of its kind in Calcutta, and was founded in 1870 by the late Mr. Frederico Peliti, who left Italy to enter the service of the Earl of Mayo, a former Viceroy, as chief confectioner, that being the first appointment of the kind in Government House. After the assassination of the Viceroy at Port Blair in 1872 Mr. Peliti started in business for himself. Notwithstanding the fact that the luxuries which Mr. Peliti wished to place before the public were absolutely unknown in India up to that time, he successfully overcame all the initial difficulties and eventually created a demand for his products that made his name famous throughout the country. His business underwent continual development, and in 1903 Mr. Peliti removed from his original premises at 10-11, Esplanade into the present large and handsome establishment, which is celebrated throughout India. Since his death in 1914 the business has been under the direction of his son, the present proprietor, Chevalier E. Peliti.

The firm have always transacted an important trade in the manufacture of wedding and other cakes, chocolates, and sweets of all kinds. They are noted for the merit of their service and sup-

plies as caterers, and in that connection have the honour of appointment to His Majesty the King-Emperor, in addition to holding similar warrants from successive Viceroys of India and Governors of Bengal since the time of Lord Mayo. They have likewise been greatly in requisition by Indian chiefs on special occasions, such as the visits of Viceroys and Governors and for tiger shooting parties, etc. Gold medals and other honours have been awarded to Messrs. Peliti at Exhibitions at Paris, Turin, and Calcutta.

The business gives employment to hundreds of persons, supervised by a staff of seventeen European experts. Mr. Peliti, too, personally directs all the details of its administration, and leaves nothing undone that can contribute to the satisfaction of his numerous patrons.

The following verses on the concern appeared in "Punch":

PELITI'S

I trol you no song that will hinder you long,
I pen you no ponderous treatise
The theme that I sing is a gossamer thing
As light as the cakes at Peliti's
Grey roofs 'mid the pines and a heaven that shines
As blue as the water where Crete is,
The malachite green of a misty ravine,
That's the balcony view at Peliti's
There are mortals, may be, who abominate tea,
(One s'poson another man's merit is),
Who shiver at the touch of a crumpet, for such
There is music and love at Peliti's
See that G. S. O. 2 with the lady in blue—
Has she noticed where one of his feet is?
On the issue that hangs on the plate of meringues
Which he buys her each day at Peliti's?
Here the rulers of Ind, from the Salween to Sind
Take their ices and wafers (McVitie's),
And elaborate schemes over chocolate creams,
At five o'clock tea at Peliti's
And I think, when we die and the wraiths of us fly
To that peace which depends not on treaties
The joys which we find will but serve to remind
Of the hours that we spent at Peliti's

BARRY and CO, Merchants and Agents, 2, Fairlie Place

THE business of Messrs Barry and Co was founded by Dr. John Boyle Barry, an adventurous Irishman, who, in the forties of last century, after studying medicine in the United Kingdom, decided to seek his fortune farther afield. Owing, however, to financial restrictions, the only way to accomplish his purpose was to enlist as a private in a regiment bound for India. On the transport on which he sailed was a certain Dr. R. Scott Thompson, who during the voyage had opportunities of studying Private Barry, and discovering that his medical attainments were of the best, bought him out from military service and engaged him as medical attendant for Messrs R. Scott Thompson and Co of Calcutta, in whose business, in course of time, Dr. Barry acquired a controlling interest. In the sixties the East India Company was at a loss to find medical men, and Dr. Barry was engaged as Civil Surgeon for Tezpur. At that period the tea industry was passing through a severe crisis, and properties were being sold for what they would

fetch. Dr. Barry, in company with a certain Dr. Ferris, Mr. James Young, and others, purchased gardens for next to nothing, and were thus able to form at Calcutta an agency concern which was the nucleus from which developed the large business of Messrs Barry and Co.

That firm was actually founded in 1876 at 5, Lyons Range, and simultaneously the sister firm of J. B. Barry and Son was established in London, now at 117, 118, Leadenhall Street, E.C. It is believed that Mr. Tom Barry, a brother of Dr. Barry, had an office at 5, Lyons Range, dating back to 1839, and it is certain that Dr. Barry carried on his activities at Calcutta long before the actual firm of Barry and Co was founded. He took a leading part in the establishment of the Gourepore Co., Ltd., founded in 1863, and associated from the time of its incorporation with Messrs Barry and Co, who are its merchants and agents. Definite information is lacking as to the early activities of Dr. Barry in tea. His partner at the

time was Mr A P Sandeman, who, originally a Lloyd's surveyor in Liverpool, joined the Hooghly pilot service, and took up tea planting on his retirement. Dr Barry died in the eighties, and the firm continued with its partners, Mr Sandeman and Mr. J H Barry, son of Dr Barry. Mr J H Barry was a mechanical engineer, and collaborated with a Mr Gibbs of London in the invention of the Gibbs and Barry tea drier, one of the earliest machines to be used in the manufacture of tea.

In 1884 Mr (later Sir) Patrick Playfair joined Messrs Barry and Co, from the firm of Shaw, Finlayson and Co, on the liquidation of the latter, and brought with him the agency of several tea concerns, of which very few now remain. Among these was the Eastern Assam Tea Co, Ltd, for which Messrs Barry and Co are still agents in Calcutta, as well as for

Bhooteachang Tea Co, Ltd
 Silombari Tea Co, Ltd
 Cheerne Valley Tea Co, Ltd
 Craigpark Tea Co, Ltd
 Eastern Assam Tea Co, Ltd
 Titadimoro Tea Estate

Mr R R Waller later joined the firm from Octavius Steel and Co, bringing also the agency

of several gardens, and he was instrumental in opening out in the Dooars several estates, including Hasimara. Sir Patrick Playfair, who took an active part in the establishment of the great tea industry, was a very prominent member of the mercantile community and represented the Bengal Chamber of Commerce (of which he was President) in the Legislative Council of Bengal and in the Supreme Legislative Council of the Governor-General of India. He was also Sheriff of Calcutta and was knighted and made a Companion of the Order of the Indian Empire in recognition of his services to the Government and the commercial community.

Messrs Barry and Co have for nearly half a century transacted a very extensive business as tea export merchants, and as such have connections throughout the world. They are also general merchants and managing agents of

The Nuddea Mills Co, Ltd, Jute Manufacturers (1,008 looms)

Jenson & Nicholson (India), Ltd, Paint, Enamel, Colour & Varnish Manufacturers

The Electric Welding & Manufacturing Co (India) Ltd, Manufacturers of Drums and Kegs

Their telegraphic address is "Barrycoy," Calcutta, and the codes used are the A B C 4th and 5th editions, Bentley's, and private

THE VULCAN IRON WORKS, LTD, Engineers, 172, Lower Circular Road

THE name of the god of fire, who fashioned the armour of the other gods, is popularly used throughout the world in the designation of iron works. Calcutta has an example of this in the business indicated above, the nucleus of which was formed in 1889 under the style of Parry and Co, Ltd, at Garden Reach. As the ground there was requisitioned by the Government, the concern was accordingly removed in 1900 to the present site in Lower Circular Road, under its present name of The Vulcan Iron Works, Ltd.

The land occupied is nine acres in extent, and within that area has been developed an engineering and iron-working establishment so hidden from public view by the surrounding buildings that there is little if any indication of its existence from Lower Circular Road, one of the main arteries of the city. About 500 persons on the average are employed there, but the number would naturally be very much greater without the up-to-date equipment of machinery which reduces labour to a minimum, and contributes to the maximum efficiency of workmen and quality of output. The plant, operated by electricity, has been continually improved and kept in line with modern inventions, for in such a business the minutest details of time and labour in productive capacity have to be very carefully watched. In the stress of modern competition machinery that may have proved thoroughly satisfactory a decade or two ago, is not infrequently rendered obsolete by new contrivances of increased power.

The products of the pattern and wood-working section of the Vulcan Iron Works may be

regarded as the initial stages of the interesting operations which eventually result in finished castings, ranging from articles weighing a few ounces to as much as six tons. The iron foundry specialises in large pipes and "specials," pump barrels, cylinders, and a wide range of miscellaneous articles. The non-ferreous metals are handled in a separate foundry, where brass, gun metal, acid-proof bronze, white-metal and aluminium castings of all descriptions are produced. The Vulcan Iron Works, Ltd, were probably the first firm in India to successfully cast aluminium pistons and gear-cases for motor cars.

The equipment of the machine-shop is certainly impressive, presenting, as it does, a perspective of shafting and wheels, mighty lathes, and intricate and powerful machines, wherein metal is wrought into innumerable things with dexterity and precision extending to the minutest measurements. The company's activities are exceedingly comprehensive, and range from the manufacture of the smallest articles up to huge tanks for all purposes, and of many dimensions.

The Vulcan Iron Works, Ltd, operate with marked ability and success as constructional engineers, and have erected many large jute and cotton mills, etc. They were awarded gold medals for iron and brass castings, and one silver medal for constructional steel, at the Calcutta Exhibition of 1923.

Their telegraphic address is "Cupola," Calcutta, and the codes used are the A B C 5th edition, Bentley's, and private

**WORTHINGTON-SIMPSON, LTD , Civil and Mechanical Engineers, Manufacturers of all
Classes of Pumping Machinery, etc , 10, Clive Street**

No name is better known throughout the world in connection with pumping plant and allied machinery than that of Messrs Worthington-Simpson, Ltd. During the past thirty years they have contributed very much to the economic development and progress of India by their productions and services throughout that country in every phase of operation relating to water supply, drainage, condensing installations for turbine and other steam generating plant, etc. The municipal water and drainage facilities in the large towns as well as innumerable installations in mills, tea estates, and other industrial undertakings of every description testify eloquently to the firm's remarkable versatility in the most economic as well as effective solution of every problem that can arise in the wide and important sphere of activities in which they have attained such universal fame. It was Messrs Worthington-Simpson, Ltd, for instance, who installed the Durgam Chattram irrigation pumps, which are coupled directly to Diesel oil engines, the whole capacity of the nine sets being of the very high figure of 730 cubic feet of water per second. The Simla

installation was also effected by them, and consists of power pumps driven through gearing by A C electric motors, delivering the water against 2,780 feet in one lift.

The firm's head offices in India are at 10, Clive Street. There are branches at Bombay and Delhi and agencies at Madras, Rangoon, Karachi, Lahore, and Ahmedabad. The manager for India is Mr J. Russel, M I M E , A M I C E , A M I W E , assisted by a staff of highly-skilled engineers, whose work covers all parts of the Indian Empire.

The great Worthington-Simpson business was established in London in 1790 when modern engineering was in its infancy. In 1886 the firm, which, up to that time, had been known as James Simpson and Co, was formed into a limited liability company under the present designation, and new works, occupying many acres, were erected at Newark-on-Trent, Nottinghamshire. The registered offices are at Queen's House, Kingsway, London, W C 2.

The firm's telegraphic address in Calcutta is "Aquosity," and they use all the standard codes.

**W NEWMAN and CO , LTD , Printers, Bookbinders, Stationery Manufacturers, Booksellers, etc ,
3, Old Court House Street**

MODERN civilisation has developed nothing of greater influence and importance than the multiplicity of its literature, and the stock of books and other reading matter in the well-known establishment of Messrs W Newman and Co, Ltd, is an interesting and accurate index to public tastes and requirements in that connection. The books obtainable there range through every department of the publishing trade—grave and gay, educational and amusing, fact and fiction, philosophy and romance, in a great variety of binding, from the cheapest editions to handsomely bound volumes with gilt-edged leaves.

But this popular and useful source of supply of every description of literature, stationery, and fancy goods, etc, is only a small part of the business in comparison with its prominence in the local printing trade. In the latter connection Messrs W Newman and Co, Ltd, have in Meredith Lane one of the largest and best appointed printing works in India, giving employment to several hundreds of persons. The machinery equipment, operated by electricity, includes two monotypes, one linotype, and practically everything that modern science has invented for the perfection of process and result in all that relates to printing and its allied activities, such as machine ruling, bookbinding, stationery manufacture, steel die and copper plate engraving, etc. Every description of coloured printing and lithography is also ably executed by the firm. Each of the departments dovetails into the other and all are operated in

a harmony of co-ordination that contributes greatly to general efficiency and the saving of time and labour. The clientele of Messrs W Newman and Co, Ltd, extends throughout India, also to Burma, the Straits Settlements and even Aden.

The business is one of many undertakings in Calcutta with very interesting associations. It was founded in 1854 by Mr Samuel Harraden, father of the celebrated novelist Beatrice Harraden, author of *Ships That Pass In The Night*, and other famous works. Mr Samuel Harraden was a noted musician and scholar and organist of St Paul's Cathedral, Calcutta.

The original premises of the firm were at 4, Dalhousie Square, on the site of the old Bengal Club, and they moved into their present quarters in the Great Eastern Hotel arcade in 1923.

The firm was formed in 1920 into a limited liability company. The Managing Director is Mr E A Eden, son of the late Hon Mr C B Eden, Member of the Bengal Legislative Council, who had been proprietor of the business for many years. Mr E A Eden, it may be mentioned, served with the Calcutta Port Defence in East Africa during the Great War and returned with the rank of Captain and the award of M C. The other directors are Mr P H Compton and Mr J F Doyle. The firm's London agents are Messrs G Harraden and Co, 5, Brickhill Lane, Upper Thames Street London, E C. The telegraphic address is "Numanco," and the codes used are the A B C 5th edition and Bentley's.

THE GENERAL ELECTRIC CO (INDIA), LTD, 14, Old Court House Street

THE GENERAL ELECTRIC CO (INDIA), LTD, was formed in 1911, and is a subsidiary of the General Electric Co, Ltd, known all over the world as the G E C, for which it is sole agent in India.

The General Electric Co (India), Ltd, has branches at Bombay, Madras, and Lahore, and is amongst the largest suppliers in India of everything of an electrical character connected with electric power and lighting in central power stations, towns, industrial concerns, palaces, residences, and offices.

The showrooms and extensive godowns at 14, Old Court House Street, contain a most comprehensive and unique assortment of electrical goods, including the Osram lamps and Swan fans for which the company is sole distributor throughout the Indian Empire.

Affiliated with the General Electric Co, Ltd, of Magnet House, Kingsway, London, W C 2 are

The General Electric de France, Ltd
The General Electric Co (of China), Ltd
The British General Electric Co, Ltd, Australia
The British General Electric Co, Ltd, South Africa
The Anglo Argentine General Electric Co, Ltd

The General Electric Co (India), Ltd., represents, in addition to the G E C, also the following allied undertakings

Fraser & Chalmers Engineering Works, Manufacturers of Turbines and Conveyors, Mining Machinery

Peel Conner Telephone Works
Pirelli General Cable Works, Ltd
Chamberlain and Hookham, Ltd, Electricity Meters
Siemens & General Electricity Railway Signal Co Ltd

The haphazard lighting of the ordinary jute mill is providing The General Electric Co (India), Ltd, with opportunities of which it is taking excellent advantage. In this connection it has a staff of highly skilled English electrical engineers, who draw up illumination plans that meet every requirement, and the resulting installations demonstrate very impressively the economy as well as the increased efficiency of electricity in that connection. Thus the plants supplied and installed by the company in some of the largest jute mills are giving four times the light previously obtained without any increase in the power current. Upwards of one hundred tea gardens in Northern India have been equipped by the General Electric Co (India), Ltd, with electric plants, and these have proved of great efficacy in the reduction of malaria—a mosquito, for instance, cannot remain in the power radius of an electric fan.

The company's telegraphic address is "Kilowatt," Calcutta, and the codes used are Cole and private.

MACKENZIE, LYALL and CO, Auctioneers, Merchants, Commission Agents, and Proprietors of "The Exchange Gazette and Daily Advertiser," 5, Mission Row

IN Mission Row and its vicinity the impressions of the past are in abundant evidence. A portion of that old thoroughfare, close to Mangoe Lane, branches off at right angles like another street, and has the appearance of being a cul de sac, but when the seeming end of it is almost reached there is suddenly disclosed a still further continuation of the ancient way. The lofty and imposing modern three-storey building of Messrs Mackenzie, Lyall and Co, in striking contrast to the quaint old structures by which it is closely surrounded and hidden, comes so swiftly and unexpectedly into view that it never fails to surprise people visiting the quarter for the first time. Although only completed for the firm in 1918, its style is in delightful harmony with its environment, and the edifice might well have been erected in the far-off years when most of the buildings in the district were constructed.

The old world surroundings in which Messrs Mackenzie, Lyall and Co conduct their many and busy activities are in keeping with their interesting history. Their business was started in 1808 by two Scotsmen, Murdoch Mackenzie and James Napier Lyall, the latter related to the family name that has added such lustre to the civil service of India.

The firm's initial premises were on the south

side of Dalhousie Square, between Vansittart Row and Council House Street, and in proximity to coffee rooms, which, owing to their being the favourite resort of ship captains of those days, came to be known as The Coffee Exchange and subsequently as The Exchange. In place of those buildings now stand some of the great modern office structures of Calcutta, but The Exchange is still commemorated in the title of *The Exchange Gazette and Daily Advertiser*, which, started by Messrs Mackenzie, Lyall and Co in 1818, and, therefore, one of the oldest periodicals in the Orient, still demonstrates its interest and utility very effectively and with a popularity which the passing of the years only serves to enhance. The first premises of Messrs Mackenzie, Lyall and Co were extended considerably in course of time, and eventually embraced the building that had originally been the palace of Bishop Middleton when St John's was the principal church in Calcutta, a century before the Cathedral was contemplated. They remained there until 1888 when they removed to Lyons Range, and thence in 1918, as already indicated, to their present quarters in Mission Row.

The old copies of *The Exchange Gazette and Daily Advertiser*, carefully preserved by the firm, are eloquent of times and conditions that have

gone for ever, and the fact that they are often utilised by subpoena by the Court of Small Causes is an eloquent indication of the fund of valuable local information which they contain. Thus, for instance, one of the bound volumes for 1840-45 records that the first tea sale in Calcutta was held by Messrs Mackenzie, Lall and Co, while in the following volume for 1846 is described the local excitement in connection with the then prevailing trade in opium in which the firm's services were utilised as auctioneers. The ivory hammer that was used for a certain remarkable sale in that connection is also amongst the interesting mementoes kept by the firm of their historic activities in former times.

Messrs Mackenzie, Lall and Co are the leading auctioneers in India, and the articles dis-

posed of at their sales embrace the entire gamut of human necessities and luxuries. They are also large wine and spirit merchants, and amongst the many noteworthy brands handled by them are the celebrated "Eashaw" brandy, "Beehive" brandy, and Robertson Bros' port, for which they are sole agents in Calcutta.

Insurance forms an important department of their business and they are agents for the Queensland Insurance Co, Ltd, National Assurance Co of Ireland, Motor Insurance Co, Ltd, and L'Urbaine Insurance Co, Ltd. The partners are Messrs Willoughby Stuart and H F Coltart. The telegraphic address is "Viking," Calcutta, and the codes used by them are the A B C 5th and 6th editions, A1, Bentley's and Western Union.

THE ANGUS CO, LTD, Manufacturers, 3, Clive Row Proprietors of Angus Jute Works and Angus Engineering Works, Angus P O, Hooghly District.

THE Angus Jute Works, established in 1913, gives employment to about 30 Europeans and 6,000 Indians. The Angus Engineering Works, established in 1917, employs about 30 Europeans and 1,800 Indians, who are kept busy in the foundry, forge and machine shop making textile machinery for the Calcutta jute mills. They make castings up to 20 tons, and turn out almost the complete line of machinery for a jute mill.

The telegraph and post office at the works is Angus, Hooghly District, Bengal. The office of the Engineering Works is at the works, and the telegraphic address is "Angusworks Angus-india."

All business in connection with the Angus Jute Works is transacted at the office at 3, Clive Row, the telegraphic address being "Anguspence," Calcutta.



TAMARIND TREE AT ANGUS,
looking up the road in front of No 2 Bungalow
Beyond the line of bushes on the right the lawn
slopes away to the river, not visible in the picture

HENRY WILLIAMS (INDIA), LTD, Manufacturers of Railway Appliances
Head Office 7, Church Lane

This company is a subsidiary of the well-known manufacturers of railway appliances, Messrs Henry Williams, Ltd, at whose works at Darlington are made many of the appliances which contribute to the utility, comfort, and safety of modern railways, with special reference to permanent way and signal work. For the purpose of being better able to deal with the great demand for their productions in India, a separate company was formed in 1921, under the name of Henry Williams (India), Ltd, which has become one of the noteworthy industrial undertakings in Calcutta. That company's works in Andul Road and Bharpara Road, Howrah, give employment to about 1,200 persons, and are well equipped for the wide range of work therein performed, which includes the manufacture of points and crossings, steel sleepers, bolts, nuts, rivets, spikes, signal-lever frames, and permanent way and signal

appliances of all kinds. The machinery and methods are of the most up-to-date kind, and are a very creditable demonstration of what can be done to accomplish difficult manufacturing operations with local labour. Many of the patent devices in possession of the company are standard articles in British and Indian railway practice, and are both economical in labour saving and highly contributory to the perfection of safe working conditions on railways. The business is well established, and its products are well known for their good quality.

The directors of the company in India are Messrs O R Williams, C M Atkinson, and A H Bishop, who are expert railway engineers with extensive knowledge and experience in that connection. The company's telegraphic address is "Pointsmen" Calcutta, and they use the 6th edition of the A B C code.

LIGHTFOOT REFRIGERATION COMPANY, LTD, Balliaghatta Road, Entally

A description of this company will be found in the section entitled "Commercial Bombay."

THE GREAT EASTERN HOTEL, LTD, Old Court House Street

THE nucleus of the Great Eastern Hotel was formed in 1851 by Mr David Wilson under the name of "The Auckland Hotel and the Hall of all Nations," and included various properties and shops. The entire premises were sold by Mr Wilson in 1865 to a company formed to take them over.

The company at the time of the transaction was not in a position to pay the whole amount of the purchase money, and the properties were mortgaged to Mr David Wilson to secure the balance of the purchase money, but before repayment in 1886 the Great Eastern Hotel Co., Ltd., went into voluntary liquidation for the purpose of reconstruction, and a new company under the same name was formed.

Meanwhile many improvements and additions had been made to the hotel, which resulted in its becoming one of the largest and best appointed hotels in India. The shops which had been on the ground floor were cleared away, giving place to the spacious and attractive entrance hall and offices with electric elevators connecting all the upper floors.

To describe the hotel as it is at the time of writing is unnecessary, as the establishment is now being rebuilt at an estimated cost of Rs. 30 lakhs. It must be understood, however, that plans have been evolved which reduce the inconvenience of the great transformation to a minimum. Thus the cuisine and service are as attractive as ever. Indeed, the care expended in that connection leaves nothing to be desired. The culinary departments are equipped throughout with the latest devices for the perfection of process and result, including refrigerating chambers, marble counters, and the most modern contrivances for cleaning plates, polishing silver, etc. The pleasure of lunching or dining at the Great Eastern Hotel is enhanced by its orchestra of talented musicians.

The average stock of choice wines and spirits kept for the hotel's requirements is of a value of £20,000, while the assortments of preserved food dainties of every description in its storage sections represents the choicest comestibles that the world can supply. The water supply is augmented by two artesian wells, 310 feet and 280 feet deep respectively, so that the purity of the water so obtained is beyond question. The hotel has its own bakery and bread depots, and its own aerated water factory equipped with Barnett and Foster machinery, where all the operations are subservient to the most scrupulous cleanliness as well as purity and high quality of the output. The broad balcony, charmingly decorated with flowers and plants, is admirably adapted for *dolce far niente*, or for watching the panorama of Old Court House Street.

Another pleasant place is the large reading and writing hall plentifully supplied with all kinds of literature, including the leading English illus-

trated weekly periodicals. The corridors of the hotel are composed of marble slabs, and the side walls are covered with white tiles up to a height of about four feet. The floors of all the bedrooms and public sections are also of marble, and electric fans are installed in all the rooms. Most of the bedrooms have their own baths with hot and cold water and modern sanitation.

At present the area of the ground occupied by the Great Eastern Hotel comprises about an acre, but the scheme for the new building provides for accommodation covering twice that area. The frontages of the complete site will be, on Old Court House Street, 240 feet, on British Indian Street, 440 feet, and on Waterloo Street, 437 feet. In the new design, arrangements are made to give the greatest airiness and to provide as many rooms as possible with a southern aspect. On the Waterloo Street frontage on the south side, a large open court yard with a garden will be provided, and it is about this that the buildings will be grouped. The main entrance will be in its natural position in the centre of the north block, which will be approached from Waterloo Street or, as at present, from Old Court House Street. There will also be entrances from British Indian Street.

A feature will be the main lounge, taken up through two floors over an area of 3,360 square feet. A tea lounge, grill room, American bar, billiard-room and offices will also be accommodated on the ground floor.

Amongst the new improvements will be a public restaurant and ball-room with an area of 3,400 square feet, and a roof garden with an area of 4,320 square feet. The total number of bedrooms available on all floors will be 276, but by a special arrangement of other rooms, it will be possible in an emergency to increase this number to a maximum of 286. A very noteworthy characteristic of the new rooms will be their adaptability for conversion as required into independent service flats.

Other modern features in the new scheme are pneumatic and speaking tubes, stage, cinema, radio tower, and children's playroom. Telephone will be connected in all the apartments.

The directors of the company comprise Messrs E. Nissim, C. L. Scott, G. F. Ross, O. Josephson, and Babu Grandra Nanth Roy, who are prominent and highly esteemed business and professional men of Calcutta. They are to be complimented on their able General Manager and Secretary, Mr W. J. Reynolds, who has been engaged in hotel and restaurant business since he was fifteen years of age. After extensive experience of it with some of the leading hotels and restaurants in Paris and London, he has been over the management of The Great Eastern since 1904. The telegraphic address of the hotel is "Greastern," Calcutta, and the codes used in the A B C 4th and 5th editions, A1, and B1.

A. and J MAIN and CO , LTD , Structural Engineers, 10, Clive Street

The name of A and J Main and Co , Ltd , is well known throughout the world in connection with everything pertaining to structural engineering. In their Clivesdale Iron Works, Possilpark, Glasgow, has been produced for many decades work that has well upheld the fame of Scottish enterprise and ability in that connection.

The history of the firm's activities in India dates from 1873, when Mr J A R Main, one of the original founders of the company, opened an agency at Calcutta under the management of Messrs Duncan Bros. Ten years later, at the time of the Calcutta Exhibition, the agency was taken over by Messrs McLeod and Co , who conducted it until 1900. Up to that date nearly all the work undertaken by the firm was in connection with the tea industry, and Main's leaf and tea houses may be seen to-day in all districts in which the plant is cultivated.

It was, of course, inevitable that other manufacturing firms should enter the field in which Messrs A and J Main and Co's enterprise had been so successful, but the fact remains that this company were the pioneers in structural work in the tea gardens and factories of India, and the improvement effected in recent years in that connection is to a very large extent due to the manner in which they adapted themselves to meet the changed requirements of planters.

The company's workshops at Sealdah were soon found to be altogether inadequate for the increasing volume of trade, and in 1907 new works were opened at Shalimar, on the western

bank of the River Hooghly, about four miles from Calcutta.

The first contract to be executed under the new conditions was the superstructure of the North Western Railway carriage and wagon workshops at Lahore, which required about 7,000 tons of steel. Other steel works of importance erected by the company include an extensive range of buildings of the Tata Iron and Steel Co at Sachin, workshops for the Bengal Nagpur Railway at Kharagpur, having a covered area of 500,000 square feet, the Grand Oriental Hotel, Colombo, for which 2,500 tons of steel were supplied, a suspension bridge with a clear span of 6,300 feet for The Burma Oil Company, Rangoon, Sealdah Station, Calcutta, for the Eastern Bengal Railway Co , Howrah Station, Calcutta, for the East Indian Railway Co and the Bengal Nagpur Railway Co systems, and a large number of bridges for railway crossings and roads.

Although the firm occupy a leading position in supplying steel roofing for all purposes, they have built up a very extensive fencing business, and it is no exaggeration to say that a very large proportion of the fencing and railing used in India by railway and other enterprises is manufactured by them.

Messrs A and J Main and Co , Ltd , are represented at Bombay. Their telegraphic address for both Bombay and Calcutta is "Mainco", and the codes used by them are the A B C 5th and 6th editions, Engineering 2nd edition, and Bentley's.

SIEMENS (INDIA), LTD., Electrical Engineers and Manufacturers, 4, Lyons Range

ESTABLISHED in 1923, Messrs Siemens (India), Ltd , are as electrical engineers and manufacturers operating with characteristic German thoroughness of organisation in their service and supplies. The satisfactory manner in which they have completed many large and important contracts augurs well for still greater achievements in the same connection. Amongst the things already done by them mention may be made of the supply and installation of the 8,000 kw generator for the Tata Iron and Steel Works at Jamshedpur, the supply and installation of the Lahore new electric lighting plant of 6,200 kw , also the electric lighting plant of Dharwar, Dholpur, Sukkur, Jullunder, Hingenghat, Huhli, Saharanpore, Gujranwala, Hyderabad (Sind), and Gauhati.

Messrs Siemens (India), Ltd , have at Calcutta a workshop where many highly skilled men are employed in all kinds of electrical and mechanical work. They have also branches at Bombay, Lahore, Rangoon, agents at Madras and Colombo, and sub-agents throughout the Indian Empire.

The business is a subsidiary of the famous firm of Siemens-Schuckert, who, with their equally

large and related contemporaries, Messrs Siemens and Halske, are the leading manufacturers in Germany of every description of electrical and general engineering machinery and equipment, and their extensive factories at Berlin, Gartenfeld, Charlottenburg, Lichtenburg, Nuremberg, and Vienna, are unsurpassed of their kind anywhere, while branch offices are established at all the principal cities of the world. Mr Werner von Siemens, who laid the foundation of that huge and influential combination in 1847 with a staff of only 24 mechanics, was the inventor of the electrical dynamo, and through his genius the Morse code apparatus was ultimately developed. By him, too, the first electric cable was laid between England and the Continent. His brother and eventual partner was Sir William Siemens of England.

The managing director of Messrs Siemens (India) Ltd , is Baron C de Rziha and the other directors are Messrs. J Van der Noordaa, Lala Harishenlal, and F M Leslie. The firm's telegraphic address is "Wernersea" Calcutta and the codes used are Bentley's and the A B C 6th edition.

SEAPORTS OF INDIA AND CEYLON

**GLENFIELD and KENNEDY, LTD , Hydraulic and Irrigation Engineers,
Fairlie House, 4, Fairlie Place**

MESSRS GLENFIELD AND KENNEDY, LTD , are famous all over the world for their manufactures of sluice valves, hydrants, and all classes of water and sewerage-works fittings, hydraulic machinery,



**KILBURN HOUSE, 4, FAIRLIE PLACE,
Containing Offices of
GLENFIELD and KENNEDY, LTD**

pumping machinery, irrigation sluices, Kennedy's patent water meters, etc. Their business was founded in 1855, and has developed into one of the largest concerns of its kind in the United Kingdom. The headquarters and works at Kilmarnock, Scotland, cover an area of about 23 acres, and give employment to thousands of people, who form a considerable proportion of

the population of that town. The firm's foundry production weekly in castings of every description is about 400 tons.

Messrs Glenfield and Kennedy, Ltd , are contractors to the Admiralty, India Office, War Office, Crown Agents for the Colonies, etc , etc. They have been established in India since 1908, when they opened their first office there at Bombay. In 1918 their Calcutta office was established. The work which this prominent and influential firm have performed throughout the Indian Empire includes everything pertaining to the highly specialised branches of service and supply for which they are so well-known everywhere. They contracted, for instance, for the supply and erection of the under sluices and the regulators for the head works of the Sadar Canals in the United Provinces, and at the time of writing are supplying and erecting similar materials for the Nizam of Sagar's works, Hyderabad. They also supplied the large hydraulically operated penstocks, the hydraulic hauling machinery for the cession, and the hydraulic pumping plant for the new King George's Dock, Calcutta, which will be one of the greatest docks in the Orient. Recently they completed a large contract in connection with the supply of valves for the new Calcutta Corporation Waterworks Reorganisation Scheme.

The firm's general manager for India is Mr T Sinclair Kennedy. The manager at Calcutta is Mr T H Watson, A M I C E, M Inst E (India). The telegraphic address is "Glenfield," Calcutta, and the codes used are the A B C, 1st edition, Engineering, and private. Messrs Glenfield and Kennedy, Ltd , are agents for Fleming and Ferguson, Ltd , Phoenix Works, Paisley, dredging plant, and British Pitometer Co. Ltd, 39, Victoria Street, London, S W 1, Venturimeters, Cole recorder and Cole recording pitometers.

ANDERSON, WRIGHT and CO , Merchants and Agents, 22, Strand Road

GENERAL merchandising in Calcutta as elsewhere necessitates accuracy of judgment, as well as thorough knowledge and experience of goods and the intricacies and peculiarities of native trade. Pitfalls for the unwary are numerous indeed, and all the more credit redounds, therefore, to the firms who have in this great market built up an extensive connection and a reputation for reliability and resource that has withstood all the severe tests which recent years have imposed on even the soundest and strongest concerns. Messrs Anderson, Wright and Co , for instance, have seen many changes in goods and methods since the inception of their business in 1872, but have ever adapted themselves with enterprise and ability to the evolution of local wholesale trade in every department of commerce. Amongst the leading importers of cotton piece-goods, they are, and have ever been, quick to seize every oppor-

tunity presented by the fluctuations of demand and supply, and have put through many a clever deal by accurate interpretation of specialised requirements accruing from careful study of the many factors in connection with local business. The original founders have been long deceased, and the present partners are Mr J Goodman, London, and Mr R Dalglish, Mr C A Wild and Mr I A Clark, Calcutta.

Besides their activities as wholesale merchants Messrs Anderson, Wright and Co operate as Managing Agents of

Khaddah Coal Co, Ltd
Bokaro & Ramgarh Co. Ltd
Central Kurkend Coal Co, Ltd
Sarakdih Syndicate

And also agents for

Commercial Union Insurance Co, Ltd
Natal Direct Line of Steamers

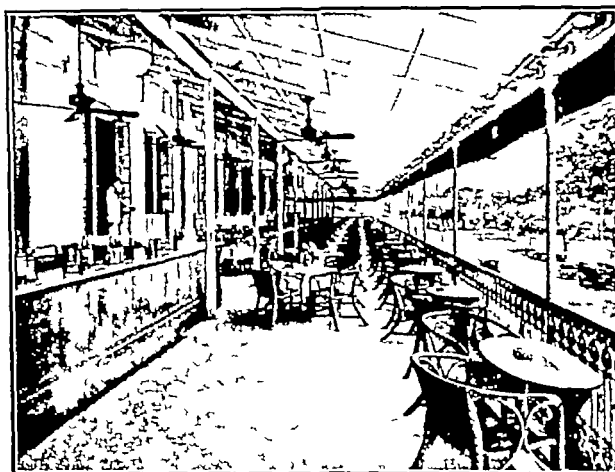
A FIRPO, LTD , Confectioners and Caterers, Chowringhee

Firpo's! What a name that is in Calcutta in connection with everything bright and entertaining, good food and select wines and spirits. Amongst those who know the great city, Firpo's is pleasing to utter and hear, especially when arrangements for the evening are under consideration. Firpo's, as a happy remembrance or a waiting delight, must doubtless obtrude greatly amidst the weary labour and monotony of the daily routine, and in lonely rooms and strenuous offices thoughts of

is pre-eminent for music, dancing, and joyousness, for delicious eatables and drinkables, amidst artistic and refined surroundings, nice people, well dressed and well-behaved—not for the rag-tag and bob-tail, who are catered for elsewhere. Firpo's has room for more than 1,000 guests at any time, including its balcony lounge, the greater part of which overlooks the beautiful expanse of the Maidan, the great health asset of Calcutta.



LADIES' TEA ROOM



BALCONY OVERLOOKING THE MAIDAN



BALL AND DINING ROOM



CONFECTIONERY DEPARTMENT

SCENES IN FIRPO'S RESTAURANT.

Firpo's and what it connotes come and go with glad suggestion and promise. There is not another undertaking like Firpo's in the Orient. It combines business and pleasure in a way unsurpassed east of Suez. It caters to modern requirements with an acute understanding of what is wanted by people surfeited with mediocrity and less. Firpo's stands for the extra touch, "the little more and how much it is," and the innumerable little details of the superlative. Firpo's has become so familiarly and popularly established in the social life of Calcutta, that its influence is beyond ordinary appraisal. Primarily, Firpo's

Everything connected with Firpo's is the result of long and careful evolution from the ordinary to the extraordinary. Its famous Louis XVI ballroom and restaurant has no duplicate in India. One side of the ballroom, extending from its special sprung dance floor to the ceiling, is a huge mirror, which enormously enhances the appearance of the beautiful hall, and gives the illusion that it is twice as large as its 2,400 square feet. An example of the fastidious attention paid by Firpo's to the welfare of the guests may be indicated by the fact that the atmosphere of the restaurant and ballroom and its adjuncts is kept

constantly fresh and pure by the great electric Sirocco fan on the roof, which has a draft of 1,000,000 cubic feet of fresh air per minute. No other place in Calcutta is similarly equipped. It is not surprising, therefore, that there is dancing at Firpo's every evening throughout the year, in the hot season as well as the cold, and in that respect also it is unique. Its gala nights are events of great anticipation, delightful realisation, and happy remembrance. Parisian dolls and souvenir gifts are presented to guests on such occasions.

But Firpo's is very much more than a great restaurant, equipped and operated on the lines of its best European contemporaries. It is the largest confectionery business in India, as might be inferred by the spacious retail department on one side of the popular cafe on the ground floor opening on to Chowringhee. The handsome showcases are particularly noteworthy and in harmony with their delicious contents, for Firpo's productions have a reputation extending not only throughout India, but across the seas. The beautiful illustrated catalogue of the company's cakes and confectionery is a masterpiece of elegance, and a surprising revelation of the wide range of their productions, which embrace the choicest dainties in the most artistic forms that could be imagined. The reproductions therein of the gold medals awarded to Mr A. Firpo for wedding cakes, confectionery, and catering, at various London, Manchester, and Calcutta Exhibitions speak more eloquently than columns of stereotyped phraseology.

The business gives employment to about 500 persons, and all the departments are under the supervision of a staff of forty highly-skilled Euro-

peans, each a specialist in his particular job. To anyone inspecting its ramifications, which are very much larger than even its enthusiastic patrons realise, the greatest surprise, doubtless, would be in the kitchen, bakery, and confectionery departments, where a plant of machinery is in operation that not only reduces labour to a minimum, but performs the work with ever so much greater thoroughness and efficiency and eliminates any hand contact with the materials, which are received by the consumer in virgin purity and freshness. The 4,000 loaves baked by Firpo's daily are untouched by hand in their manufacture, for the dough is mixed by machinery, and the loaves, after baking in the wonderful steam ovens, are deposited automatically on to the specially prepared wax paper wrappers and despatched, the heat of the new loaves securing the adhesion of the wax paper at each end. No hands touch Firpo's loaves until their excellent and effective wax paper covering is removed.

Messrs A. Firpo, Ltd., operate on a very extensive scale as caterers, for which purpose they have facilities and resources equal to the largest possible contracts, including mineral water machinery, refrigerators, etc., and great stores of provisions and liquors of the finest quality, not forgetting the firm's celebrated tea and coffee put up in vacuum tins. They have had the honour of appointment to successive Viceroys and Governors of India, and they are caterers to the Royal Calcutta Turf Club. To them are entrusted the arrangements for many of the large festivals and social events in Calcutta, including the annual St. Andrew's Dinner, at which some 500 guests are present.

ALLEN, BERRY and CO, LTD, Automobile Engineers
Head Office and Works 62, Hazra Road, Ballygunge, Sales Department and Service
Station 26, Park Street (Oxy-Acetylene Welding and Metal Cutting Co., Ltd.)

MESSRS ALLEN, BERRY and Co. have the distinction of being the first automobile firm that opened premises in Park Street, which, since their advent there in 1914, has become the principal thoroughfare in Calcutta for the motor trade. Their business was started in 1909 as a small general engineering concern, and was acquired by Mr P. Gibson, who removed it to Hazra Road, Ballygunge. In 1922 it had grown to an extent that led to the firm being formed into a limited liability company, and soon afterwards the works were greatly enlarged and equipped with everything for the expedition and perfection of all operations relating to the motor industry. About 300 workmen are there employed under the supervision of European experts.

Messrs Allen, Berry and Co., Ltd., who have branches at Delhi, Lucknow, and Gauhati, are agents for the Chevrolet, Oakland, Pontiac, and Vauxhall cars, and the fact that they sell thousands of these per annum indicates eloquently not

only the merits of the celebrated vehicles but also the company's prominence in the trade which they exemplify so well.

Towards the close of the year 1914 the oxy-acetylene department had grown to such an extent that it was taken over as a separate concern by a company formed for that purpose under the style of the Oxy-acetylene Welding and Metal Cutting Co., Ltd., the shareholders comprising the directors of Messrs Allen, Berry and Co., Ltd., and a few personal friends. The company in question has carried through very satisfactorily a large number of important welding and cutting contracts, including that in connection with the Lower Ganges Bridge at Sara. Special attention is devoted to broken machine parts, including intricate castings such as motor-car cylinders, aluminium crank cases, as well as repairs to boilers and ships and the machinery for all kinds of factories.

RANKEN and CO , LTD , Gentlemen's Tailors and Outfitters, 4, Old Court House Street

SOME of the firms in Calcutta have records unsurpassed by any others in the British Empire. The business of Messrs Ranken and Co , Ltd , for instance, established in 1770, may well be regarded with meritorious pride by its proprietors. When it was founded America belonged to Great Britain and slaves figured considerably in the world's merchandise, the French Revolution had not yet occurred, nor had the star of Napoleon blazed into glory. Those were the days of the Honourable East India Company, and the thrilling story of the British occupation of India had not proceeded very far.

No country in the world has been more noteworthy for the gorgeousness of its military and other uniforms than India. Many of the splendid uniforms of the Indian Army in the early days were made from designs submitted by Messrs Ranken and Co. What interesting reminiscences and associations, customs and styles of long-past times, are conjured up by the name of this famous house that may still continue for another 150 years, or even indefinitely, so long as Calcutta is inhabited by men to whom excellence of cut and quality in clothing is a matter of importance.

The general ensemble of the firm's well-known establishment at 4, Old Court House Street is distinctly superior in every detail of appointment and stock. Nothing is seen there not in harmony with the utmost refinement and good taste. The assortments of fabrics on shelves and counters, and the artistic display of the various items pertaining to male outfitting, give the impression of being the best that the world can offer in such things. There is no discordant note in the chromatic effects and comparisons of ties and silk handkerchiefs, of socks and footwear, of suitings specially selected for men accustomed by birth and breeding to the best. Tailors by appointment to H M the King Emperor, H R H the Prince of Wales, and other members of the Royal Family, Viceroys, Governors, Commanders-in-Chief in

LANDALE and CLARK, LTD , Jute Merchants and Brokers, Fire and Loss Assessors and Salvage Contractors, 11, Clive Street

THE great jute industry of Calcutta has in Messrs Landale and Clark, Ltd , one of its best known firms of merchants and brokers, who have no fewer than 19 large baling premises in the Mofussil. On one side of their business they are prominently and influentially engaged as fire and loss assessors and salvage contractors. The work in connection therewith at Calcutta differs considerably from that of their contemporaries at the other great ports of the world. The conditions at Calcutta have developed a complexity contributed to very greatly by Indian psychology, which operates often in ways not demarcated by orthodox rule and foreign regulations, while the character of the products shipped from the great

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India Robe Makers also by appointment to the Most Exalted Order of the Star of India, the Most Eminent Order of the Indian Empire, Messrs Ranken and Co , Ltd , are not to be

**PREMISES OF RANKEN and CO., LTD**

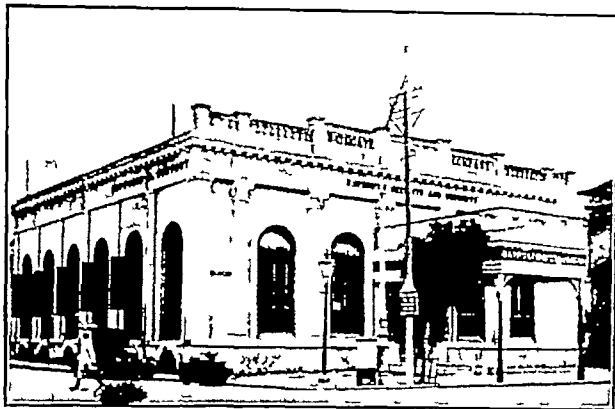
considered in the category of the ordinary and commonplace. Masters of sartorial art in its highest phase, they are as different from the crude commercial tailoring firms as a Michael Angelo picture is from a pot-boiler in a suburban furniture shop. Rankens' the name is mentioned as an orthodox standard in clubs and homes where the best people congregate, people able to appreciate the "little more and how much it is, and the little less and what worlds away" in the cut of a garment and the texture of the material.

The firm was formed into a limited liability company in 1920. The managing directors are Messrs J Ritchie and P O Fawkes, and the other directors are Messrs J G Grahamslaw and F Lawrence. Branches of the business are established at Simla, Lahore, Rawalpindi, Murree, and Delhi. The telegraphic address of Messrs Ranken and Co , Ltd , is "Mentally," and the codes used are the A B C 4th and 5th editions and private.

port necessitates careful inspection and analyses for avoidance of trouble that multiplies indefinitely. Thorough and intimate acquaintance with Indian subtleties is an invaluable asset to individuals who would operate successfully at Calcutta as fire and loss assessors and salvage contractors, and Messrs Landale and Clark, Ltd , appear to be in full and secure possession thereof in view of the fact that they are the principal firm in that connection in India. Messrs Landale and Clarke, Ltd , have been established for about forty years. The telegraphic address is "Lanark," Calcutta, and they use the A B C 5th edition code.

**BATHGATE and CO , Chemists, Druggists, and Aerated Water Manufacturers,
17, 18, and 19, Old Court House Street**

WHEN the business of Messrs Bathgate and Co was founded in 1811, medical science was still governed largely by the traditions and restrictions of the unenlightened past, and the activities of the



PREMISES OF BATHGATE and CO

apothecary were correspondingly circumscribed by crude ways and means difficult of realisation in these days of amazing achievements in every branch of scientific research and experiment for the prevention and amelioration of pain and illness. The establishment of Messrs Bathgate and Co is one of the most noteworthy buildings in Old Court House Street, and were it possible to ascertain with precision the influence which has been exerted by the operations carried on within it throughout its long history, the resultant story would doubtless be much more thrilling than any novel or best seller of to-day. Through the portals of that familiar edifice of hope and healing have passed countless thousands of people with necessities and desires as varied as human nature and the ills to which it is physically subject. That procession started in the great days of Napoleon and Wellington, when quaint recipes, handed down from generation to generation, were compounded by the firm's dispensers, whose qualifications were not so exacting as they now are, and the British Pharmacopœia was still comparatively in its preliminary stages in comparison with what it has since become. Very different, too, must have been the supplies of Messrs Bathgate and Co from what they now are when their name began to be famous in the unattractive and undeveloped Calcutta of that date. The great variety of modern patent medicines and toilet articles had not been evolved, and various herbs, pomades, powders, ointments, pills, and mixtures, well known doubtless in their day, have long passed into oblivion, and have been replaced by the vast variety of specifics that are celebrated throughout the world. Behind the retail section

that is appointed in a manner thoroughly in keeping with professional discrimination and the traditions of the pharmaceutical avocation, are numerous departments eloquently indicative of the large trade transacted by Messrs Bathgate and Co as manufacturing chemists and druggists, etc. The list of their preparations is extremely exhaustive, and includes many a remedy that has become firmly established in popular favour and confidence through many years of proved efficacy. Probably the oldest and best known of the firm's productions is their perfumed castor-oil for the hair, of which they sell immense quantities put up in 4-oz bottles, as they did more than one hundred years ago.

Messrs Bathgate and Co are also manufacturers of all kinds of aerated waters, which they turn out at the rate of about 800 dozen bottles daily. The water for the beverages passes through Berkefeld pressure filters, and the utmost care is taken to render its purity beyond question. Similar care for absolute cleanliness in every detail is also observed in the manner in which the bottles are cleansed in solutions of permanganate of potash. The equipment in the aerated water factory was recently augmented by a refrigerator plant capable of producing a ton of ice daily. No other aerated water factory in Calcutta is similarly equipped, and by means of the new improvement the firm are able to keep the water of the manufacturing operations down to 40 deg Fahr, instead of the 80 deg to 90 deg with which they had to contend before the advent of the new machinery. The firm have their own bonded laboratory, where tinctures and all spirituous preparations are manufactured.

Another department in which Messrs Bathgate and Co operate with marked success is in connection with photographic materials of every description and the printing and developing of films and plates, for which purpose they have excellent facilities and resources. The manufacture of all kinds of inks is another noteworthy department of their business.

The firm give employment to between four hundred and five hundred Indians, and their staff of eighteen Europeans is, with one exception, entirely Scottish, so also are the partners, Messrs E Whyte, A M Traill, W T Sinclair, J R A B Gardner, A G Lunan, A D Gillespie, and Jas J Mather. Messrs Bathgate and Co have branches in Camac Street and Ballingunge, Calcutta. Their telegraphic address is "Bathgateco," Calcutta, and they use the A B C c 5th and 6th editions.

" ENGLISHMAN," LTD , 9, Hare Street.

The Englishman has the distinction of being the oldest daily newspaper in India, and it is believed to be also the oldest in the British Empire, outside the British Isles. It was first published in July, 1821, under the title of *John Bull in the East*, and though four or five other journals were already in existence in Calcutta, *John Bull* had no difficulty in maintaining itself and ultimately in outliving all its rivals. In fact, until it appeared there was no newspaper in Calcutta worthy of the name. Its contemporaries were scurrilous sheets solely devoted to personalities and making no attempt to supply news in the proper sense of the term. They were continually at war, either with individuals or with the Government, and more than one of their editors suffered deportation.

It was under these circumstances that John Lascal Larkins, a writer in the Accountant-General's Department, and John Trotter, the senior merchant, decided to establish a journal which would reflect the British virtues of sobriety and moderation, and would devote reasonable space to chronicling events of real importance. To these ideals *The Englishman* has, on the whole, remained faithful throughout its long career. Even those who have had no reason to love it, have repeatedly paid tribute to the fairness and sobriety with which it has been conducted, while as an organ of news it made its mark from the very beginning.

John Bull, as it was then styled, was the first paper in India to develop the mofussil correspondent and thus to build up a circulation outside Calcutta. The earliest mofussil correspondents were army officers, and *The Englishman* soon became very popular in military circles, a popularity it has always maintained and which stood in good stead during the Mutiny, its accounts thereof being fuller and more authoritative than those of any other journal of the period.

Prior to the Mutiny, however, the paper had made itself noted by its accounts of the Afghan War, during which the Editor, Mr J H Stocqueler, himself went to the front. He is believed to have been the first journalist who ever acted as a war correspondent. It was he who, in 1833, changed the name of the journal to *The Englishman*, and who employed C M Thackeray (uncle of the novelist) as a leader writer. Mr Thackeray's remuneration for each leading article was ten rupees and a bottle of claret, and the bottle was usually finished at the same time as the article. During this period Mr (afterwards Lord) Macaulay had the preliminary proofs of his essay on Sir James Mackintosh set up by *The Englishman* Press.

A subsequent proprietor, Mr J O 'B Saunders, was the first journalist to conceive the idea of having a special correspondent at Simla. Mr Saunders was also the first to inspire Lord Curzon, through the medium of a leading article, with the idea of erecting the Victoria Memorial. On many other occasions *The Englishman* has exerted a powerful influence on official decisions, and though it has frequently been obliged to criticise the Government, the criticism has always been justified by subsequent events.

In the development of the art of printing in India *The Englishman* was also a pioneer. It was the first newspaper in the country to adopt the linotype, and one of the first to instal a rotary press. The business has not always been situated in the same building. *John Bull* was first issued from 59, Clive Street, and after 1825 from 3, Council House Street. The latter building is still standing. In 1837 the offices were shifted to Vansittart Row, off Dalhousie Square, and finally, in 1853, they were transferred to the present building at 9, Hare Street.

THACKER, SPINK and CO } Booksellers, Bookbinders, Publishers, Printers,
THACKER'S DIRECTORIES, LTD { Lithographers, Stationers, etc ,
3, Esplanade, and 6, Mangoe Lane

NOWHERE in the British overseas possessions is there a larger business devoted to bookselling and its allied activities than that of Messrs Thacker, Spink and Co, whose handsome and imposing premises, completed for the firm in 1916, and entirely occupied by them, are unsurpassed of their kind in Asia. The main floor is devoted chiefly to stationery and fancy goods, and it is not until the visitor ascends by the electric elevator to the next floor that impressions are received of the remarkable development of the firm's book-selling trade. The fact that their stock of books is of an average value at any time of tens of thousands of pounds serves to indicate the great part which the business plays throughout India in the dissemination of literature of every description, from the cheap editions of famous novels and best sellers to magnificent volumes

exemplifying the highest achievements of pictorial reproduction, typographical display, and bookbinding art, eminently suitable as gifts and for presentation purposes. To wander amongst the firm's vast assortment of books is to realise how utterly impossible it is for the ordinary individual, even by the most studious and methodical reading, to keep in touch with modern progressive thought and discovery in every branch of human effort and interest. In the busy despatching department about 150 parcels of books are sent throughout the country daily, dispelling boredom in many a remote home, for what is more effective towards forgetfulness of dull routine and environment, or cares and troubles, than an entertaining book. Such volumes are held by Messrs Thacker, Spink and

Co in a variety well calculated to meet the most fastidious tastes and requirements

As publishers the firm have acquired a great reputation, especially in connection with professional books, such, for instance, as the legal works of Woodroffe and Ameer Ali, of whose *Law of Evidence in British India* more than 40,000 copies have already been sold, and *Lyons Medical Jurisprudence*, now in its 7th edition

Were it possible to ascertain the influence which the business in question has, by its books, exerted in India, the result would doubtless be astonishing. That influence began away back in 1819 when the concern was started by Doctor William Thacker under the name of W Thacker and Co, St Andrews' Library. In 1854 the designation became Thacker, Spink and Co, St Andrews' Library. The original premises were in Lal Bazar, whence the business was transferred some years later to the Great Eastern Hotel building in Old Court House Street. In 1841 the firm removed to 6, Government Place, and remained there until the erection of their present building in 1916, as already indicated.

Year after year the business developed, and by 1908 it had grown so much that for greater efficiency the printing and publishing departments were formed into a separate company, known as Thacker's Directories, Ltd, of which Messrs

Thacker, Spink and Co are managing agents. The celebrated Thacker's Directories comprise *Thacker's Indian Directory*, founded in 1801, *Thacker's Directory of the Chief Industries of India*, founded in 1887, and *Thacker's Calcutta Directory*, founded in 1905.

Messrs Thacker's Directories, Ltd, whose works are in Mangoe Lane, are amongst the largest printers and bookbinders, process workers, advertisement writers, and designers in India. They have been since 1865 printers and publishers of the *Indian Medical Gazette*, which published monthly, ranks in the East with the *Lancet* in England, and has a circulation of upwards of 4,000 copies.

Messrs Thacker's Directories, Ltd, are agents for —

Mander Bros, Wolverhampton

Bowater & Son, Ltd

"Senefelder" Litho Stones

Printer's Roller Co, Ltd, "Durable" Roller Composition

Furnival & Co's Machinery

Messrs Thacker, Spink and Co, who are agents for the Norwich Union Life Insurance Society, are established as W Thacker and Co at 2, Creed Lane, Ludgate Hill, London, F C 4. They have also a branch at Simla. Their telegraphic address is "Bookshelf," Calcutta, and the codes used by them are the Western Union and Bentley's.

HAMILTON and CO, LTD, Jewellers, Silversmiths, Watchmakers, etc, 8, Old Court House Street

In London, Paris, New York and the other great cities of the West are to be found establishments of jewellers, goldsmiths, and silversmiths on a very elaborate and extensive scale, but none is upheld by such unique conditions as obtain in India, and especially in Calcutta, in relation to all those precious materials that have symbolised and indicated wealth and royalty since the dawn of history and before it. The rulers of India have never been surpassed for the magnificence of their regalia and personal adornments, and that ancient land of contrasts and castes is pre-eminent amongst all countries for the splendour still exemplified by its great and wealthy nobility. These facts explain the existence in Calcutta of the business of Messrs Hamilton and Co, Ltd, established since 1808.

The handsome white frontage of that firm's establishment at 8, Old Court House Street, is entirely different from the aspect of the ordinary jewellery store which bases its attraction on overwhelming profusion of mass production goods and the sameness of the obvious and the orthodox. Extending from the street to the entrance is a covered arch which greatly enhances the appearance of the establishment, and protects on wet days the customers stepping from their motors in the reign of His Imperial Majesty, the King Emperor, George V, as it did when the subjects of his four

predecessors alighted from their gaily caparisoned horse equipages to visit the famous emporium so noteworthy for the gleam of gold and silver, and the flashing fire of exquisite jewellery. Constructed long before the methods of modern display, the windows are guarded in front by an iron railing about two feet high, which prevents too intimate approach, nor is such close inspection necessary, for the exhibition in the windows is of no stereotyped character, but a few superb examples of miniature statuary in marble and bronze, etc, which are in harmony with the manifest superiority proclaimed by every detail of the establishment and its contents.

Amongst the first objects of the beautiful interior which the artistic eye will notice with appreciation are two exquisite, almost life size, bronze statues, "The Runner" and the "Sitting Mercury." The originals of these are in the Naples Museum, and are amongst the finest works of the great Greek sculptor, Praxiteles, who lived in the fourth century B C.

The rich and choice goods shown by Messrs Hamilton and Co, Ltd, impart an impression of discriminating selection and superiority even the dullest consciousness. Where, for instance, may be found such royal crowns, necklaces, and other gorgeous specimens of the firm's skill in jewellery as are seen exhibited by them as examples of ordinary achievement and not as

out of the common The writer, during his inspection of the place, noticed an illustration of a crown made by the firm, valued at £180,000, and a necklace valued at £85,000 In contemplation of such things ordinary jewellery seems so paltry and commonplace

The business gives employment to about 150 workmen, and their operations embrace everything pertaining not only to the manufacture of jewellery, but also engraving, gilding, and electroplating

Messrs Hamilton and Co, Ltd, have always been entrusted with the auction sales of Tosha Khana, or, in other words, the treasure accruing to the Government from the fortunes of war and the changes in the royal houses of India through death and other causes Long ago they used to dispose by auction, in the portion of their premises now forming their workshop, the loot of the East India Company, and amongst the many historic collections of great treasure that have passed through their hands in this way was the glittering assortment that had been in the pos-

session of Nana Sahib, the leader of the Indian Mutiny, and which, together with other Mutiny loot, was sold by Messrs Hamilton and Co for £750,000

Among the archives of the firm are many interesting old documents testifying to the services they rendered in the far-off past, including a letter dated July 2nd, 1850, from Sir John (later Lord) Lawrence, expressing his great satisfaction at the able manner in which Messrs Hamilton and Co had always fulfilled everything committed by him to their trust

In this necessarily brief review it is impossible to deal with this famous old firm with a fulness befitting its long and influential record In 1835 the business passed into the possession of the Remfray family, with whom it remained until 1900 In 1919 the firm was formed into a private limited liability company The managing director is Mr J F Snaith, who has been connected with the concern since 1903 Messrs Hamilton and Co, Ltd, have branches at Delhi and Simla

WALTER BUSHNELL, LTD, Manufacturing Ophthalmic Opticians and Scientific Instrument Importers, 21, Old Court House Street

WHEN it is remembered that 85 per cent of all knowledge comes through the eyes, and when it is borne in mind also how easily sight can be irremediably impaired through inattention or defective glasses, there is no refutation of the fact that the business of Messrs Walter Bushnell, Ltd, is in the highest category of service and supply The firm have done, and are doing, very much in preventing and remedying imperfect vision of every description, and thousands of people throughout India and elsewhere owe to them the preservation of that priceless possession, the sight, and, therefore, all that is entailed thereby

The firm's premises in Grosvenor House, 21, Old Court House Street, are appointed with an elegance befitting their high professional status The stock in the front section embraces everything pertaining to the sphere of Messrs Walter Bushnell, Ltd, as manufacturing ophthalmic opticians and scientific instrument importers The departments behind are, however, much more impressive, and only those who have had occasion to utilise the remarkable scientific equipment in operation there can adequately appreciate the thorough and up-to-date manner in which the noteworthy business is conducted The sight-testing departments, for instance, under the charge of highly qualified English opticians, are equipped with the latest devices for detection of not only imperfect vision, but also diseased eyes Every customer whose eyes are tested by Messrs Walter Bushnell, Ltd, undergoes an examination in that connection professionally precise and accurate, and if found to be suffering from eye disease is informed and advised accordingly, but no order is accepted in such a case

In the very interesting workshop, the grinding of lenses and all the manufacturing operations range from the raw materials up to the finished articles Every individual case is treated with



**SECTION OF PREMISES OF
WALTER BUSHNELL, LTD**

minute understanding, and every prescription is fulfilled with scientific exactitude that speaks volumes for the knowledge and skill by which such achievements are possible Messrs Walter Bushnell, Ltd, are opticians by appointment to H R H the Prince of Wales, H E Field Marshal Sir William Birdwood Commander-in-Chief in India, H E Countess of Reading, H E the Earl of Lytton, and H E Sir Malcolm Hailey, and their services and supplies are largely taken advantage of by the Indian rulers and nobility of India

Messrs Walter Bushnell Ltd, also transact an extensive trade as importers of photographic materials and in the development and printing of plates and films for which they have admirable

facilities and resources. They are agents for all the photographic supplies of Houghton-Butcher (Eastern) Limited.

The business was founded in 1901 by the gentleman whose name it bears, Mr Walter Bushnell, under whose capable direction it developed so well that in 1915 the firm was formed into a limited liability company. The home office is at 189, Richmond Park Road, Bournemouth, Hants, and is under the personal supervision of Mr Bushnell. The directors at Calcutta are Messrs Geo

Lander, D B O A, F I O, and F W Fie, F B O A, F I O. A point worthy of mention is that the firm employ only qualified opticians, and their assistants at Calcutta are the following—

F R Dublin, F B O A, F I O
R T Girvan, F N A O, F A O
D Henshaw, D C O, F A O
E F Gordon, F S M C, F B O A

Branches of the business are established at The Mall, Simla, and West End Buildings, The Mall, Lahore.

HEATLY and GRESHAM, LTD, Engineers and Railway Specialists, 6, Waterloo Street.

It is not generally realised that in many respects the railways of India are more up to date in construction as well as in rapidity of transportation of passengers, and especially of freight, than those in the United Kingdom. The increase in the export and import of goods, apart from internal trade, has concurrently called for greatly increased weights and speeds of trains, and, with these, safer methods of controlling and handling have had to be devised to keep in line with changed conditions.

In the early nineties of last century the Government of India, with great foresight, realised the necessity for adequate train control, and decided to introduce a system of automatic continuous brakes. Accordingly trials of various systems were carried out under Government supervision by the representatives of different brake systems.

The Vacuum Brake Co., Ltd., of London, entered these trials, and on their behalf Messrs H Heatly and S T Gresham went to India to carry out demonstrations of the automatic vacuum brake under the conditions imposed by Government.

The Government of India, after careful consideration of all aspects of the matter, both technical and administrative, together with the completely successful results attending the Vacuum Brake Co.'s representatives, adopted the vacuum brake as standard for India on all railways.

The equipment and maintenance of such a system being naturally an undertaking of some commercial magnitude, as well as requiring special technical knowledge, resulted in the gentlemen mentioned forming themselves into a limited liability company, to handle the brake system commercially and technically.

It is a testimonial to the mechanical skill and scientific invention of the specialists concerned that at no time has the system of the Automatic Vacuum Brake, in either capacity or efficiency, failed to meet all requirements, even on the introduction of electric traction in India.

Since that time the company have extended their activities to cover almost every branch of railway engineering. In short, Messrs Heatly and Gresham, Ltd., became pioneers in the supply of railway equipment, and with their experience

were successful in introducing improvements that have withstood the most severe efficiency tests.

They are closely allied to the celebrated engineering firm of Gresham and Craven, Ltd., of Manchester, who were the pioneers of the brake system as a commercial enterprise in England, and in whose works most of the improvements and inventions connected with Vacuum Brake apparatus have originated. In conjunction with the brake experts on the spot, in India, they have always been able to keep abreast of or anticipate changing conditions, and the brake as now employed has all the latest and most efficient designs, such as the "Dreadnought" and "Super-Dreadnought" ejectors.

The development of complete continuous braking in India during recent years has evolved through the increased density and weight of freight traffic, and already accurate statistics show the great financial and technical benefit accruing from the use of an efficient brake system enabling rapid handling to be effected. Specialised technical advice has always been a feature with Messrs Heatly and Gresham, Ltd., and they maintain a large staff of trained experts, generally men who have had wide railway experience as railway men first, who are at the disposal of railway administrations at all times.

The firm's Railway Department handle, not merely as merchants but with expert knowledge every branch of locomotive and carriage and wagon equipment, not only of engineering utility but also luxury or special passenger equipment. The famous P and O Specials, carrying the Trans-Peninsula Imperial Mails, are examples of equipment of this character, introduced by Messrs Heatly and Gresham, Ltd., and embodied in coaching stock built by the State Railways on site in India.

In their electrical department they handle all types of electrical equipment, including Pritchard and Gold and Electrical Power Storage Co.'s stationary batteries, as well as N.I.F. batteries for train lighting, railway carriage fans, etc. They have branches at Bombay, Madras, Lahore, and depôts at Karachi, where large stocks of railway material are held, as at the headquarters at Calcutta.

Messrs Heatly and Gresham, Ltd, also operate as general and constructional engineers and founders, and at their Gobra Engineering Works, Entally, Calcutta, employ a large staff of skilled workers, under competent European supervision. A wide and varied range of machines is there manufactured, including water softeners and purifiers, tea machinery, pumps, road making and repairing equipment, oil fuel burners and accessories for boilers, tea driers, tempering furnaces, etc, also rolling stock parts and railway requirements of all kinds.

The Managing Director is Mr S T Gresham. The London offices are at 40, Wood Street, Westminster. The local directors are Mr G J Cassie and Mr Jesse Ellis. The telegraphic addresses are "Excluding," Vic London, "Brake," Calcutta and Bombay, "Heasham," Madras and Lahore. The codes used are the General Telegraph and Bentley's.

Messrs Heatly and Gresham, Ltd, are agents for

The Vacuum Brake Co, Ltd London
The Patent Lighting Co, Ltd London
Gresham and Craven, Ltd, Manchester

The Vulcan Foundry Ltd, Newton le Willows, Lancashire
The Eyre Smelting Co, Ltd, London
The Heatly Gresham Engineering Co, Ltd, Letchworth
James Beresford & Son, Ltd, Birmingham
The Howard Pneumatic Engineering Co, Ltd, Eastbourne
Brett's Patent Lifter Co, Ltd, Coventry
The Homet Co, Ltd, London
Thomas Howse, Ltd, Birmingham
R L Ross & Co, Ltd, Stockport
The British Reinforced Concrete Engineering Co, Ltd, Manchester
Bruce Peebles & Co, Ltd, Edinburgh
Bolton and Paul, Ltd, Norwich
Stothert and Pitt, Ltd, Bath
"Unit" Superheater and Pipe Co, Ltd, Swansea
Hasler Telegraph Works, Ltd, London
Powell Brett, Ltd, Coventry
J Dampney & Co, Ltd, London
James Gibbons, Ltd, Wolverhampton
The Buckeye Steel Castings Co, Ltd, London
Tinkle Brothers, Ltd, Wigan
Wadkin & Co, Ltd, Leicester
The J E Harris Co, Wooster, Ohio
Brown Bayley's Steel Works, Ltd, Sheffield
C Macintosh & Co, Ltd, London
Sorbo Rubber Sponge Products, Ltd, Woking

WALTER LOCKE and CO. LTD, Electrical Contractors, Motor Engineers, Sports Outfitters, etc, 4, Esplanade East

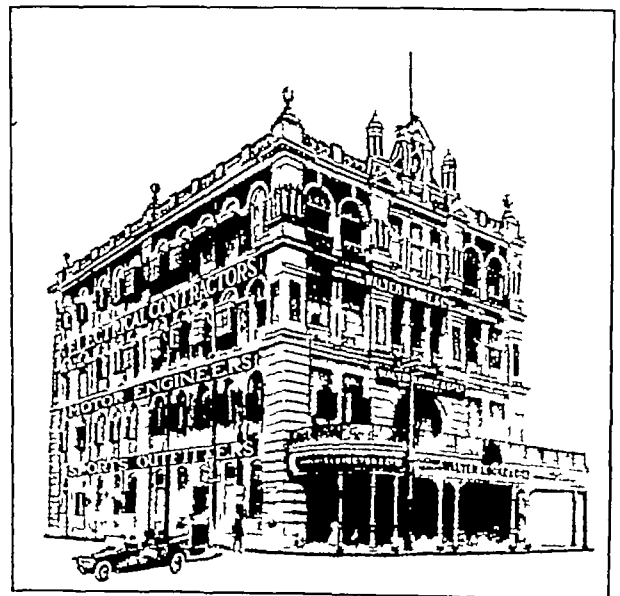
The interesting establishment of Messrs Walter Locke and Co, Ltd, may aptly be termed a place of many inventions, for its greatly assorted stock is an exemplification of scientific achievements in articles of ingenuity and utility for purposes innumerable. The firm are, for instance, famous throughout India for the excellence of their guns, and are agents for many of the best gunsmiths like Holland and Holland, Wesley, Rogers, Webley, Winchester Arms, Colt, Ivor Johnson, Harrington and Richardson, etc.

The variety of Messrs Walter Locke and Co's assortment of athletic goods of every description is particularly noteworthy, and includes those of Messrs Slazenger, for whom they are agents.

The firm's influence as general electrical engineers permeates all branches of activity in Calcutta and reaches throughout India. There is nothing in that connection which they are not prepared to undertake, and the variety of their stock is contributed to in no small measure by electrical fittings of every description, which bear eloquent testimony to the ever-developing scope of the utilisation of electricity in the home as well as in the workshop and factory.

Amongst the truly overwhelming variety of contrivances supplied by Messrs Walter Locke and Co, Ltd, are their famous "Tundice" refrigerating chests, ranging in sizes from handy patterns for railway travelling up to large sizes for household, club, and hotel requirements. Since the firm began the manufacture of these most effective refrigerators the demand for them has increased enormously.

Their exceptionally fine display of silver and electro-plated goods is formed of the productions of Messrs Elkington and Co, Ltd, the well-known manufacturing jewellers, gold and silver-smiths, and originators of electro-plating, who



PREMISES OF WALTER LOCKE and CO, LTD

are specialists in medals in bronze, gold and silver cups, trophies, shields, and prizes for every branch of sport, etc, which are well taken advantage of in India through the agents for them, Messrs Walter Locke and Co, Ltd, who have supplied

many racing cups, including the first King-Emperor's Cup of the Calcutta Races in 1912

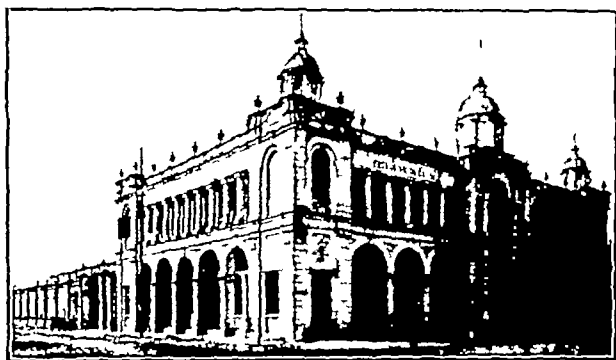
Ratner's safes are well to the fore also among the many other celebrated productions in the firm's long list of agencies, which likewise include the Raleigh cycles, Levis and Indian motor cycles, Morris Cowley, Morris Oxford, and Jowett motor-cars. As a matter of fact the firm's activities as motor engineers are equal to any of their best achievements in the other branches of their greatly varied business. In British Indian Street they have a motor and engineering establishment giving employment to 150 persons, and at Lahore they have another much bigger and better garage

which is said to be the best in Northern India. There are also other branches at Delhi and Rawalpindi.

The business was started in 1888 solely in the importation of fire-arms, and soon underwent great development under the regime of the late Mr W J Bradshaw, C I E, who had been one of the most prominent business men in Calcutta. Since his death in 1924 it has been under the control of Mr J B Harper, who has been connected with it since 1906, and is Managing Director of the company. The telegraphic address is "Waltlocke," and the code used is the A B C 6th edition.

FRENCH MOTOR CAR CO, LTD, Wholesale and Retail Dealers in Motor Cars and Accessories, Automobile Engineers and Body Builders, 234-3, Lower Circular Road

When the motor-car was first introduced into India no city was more interested and enthusiastic in its reception of the new vehicle than Calcutta, which hailed each successive improvement with a



PREMISES OF
FRENCH MOTOR CAR CO., LTD, CALCUTTA.

zest that was manifested by the Customs' returns and the increasing expansion of the local automobile trade. Nevertheless, it was found that there were many features in imported cars which were not suitable for the climate of India. There were individual preferences for a pattern of body, colour, upholstery, and mechanism, and the consequence was that customers were not always supplied with the kind of vehicle most in accordance with their tastes and requirements. At this impasse the French Motor Car Co. came upon the scene in 1905, and commenced business in Bentinck Street as motor-car importers and repairers, coach-builders, electrical engineers, contractors, and general merchants. They began in a small way with about 20 workmen, a stock of 10 cars, and floor space of only 2,500 square feet, but as they quickly realised that bodies made in Europe were unsuited to India, they began manufacturing them in their works from teakwood, and having them attached to select imported chassis, thus obtaining for the company a premier position in the coach-building trade in India. This use of indigenous timber was fully appreciated by motorists in Calcutta, and the rapid expansion

of the business led to the opening of a branch at Bombay, which now gives employment to about 350 persons. Year after year the business continued to develop, with the result that very large and specially designed premises were erected for the company in Lower Circular Road, and occupied in November, 1918. Further additions have since been made to these premises, which now cover an area of about 6 acres and give employment to upwards of 800 persons. Within that impressive place the motor industry is carried on with remarkable completeness, and the latest improvements and inventions in methods and machinery are in operation throughout the many departments, which are designed and equipped to manufacture every part of a motor car, including a complete engine if necessary. This is of special advantage to owners of cars that have no local representatives. The variety of bodies built by the company is very great, and ranges from small two-seaters to huge busses.

An example of the thoroughness and completeness with which the business is operated may be instanced by its School of Motoring, which, started a few years ago, is growing continually in utility and popularity. The workshop of that school is excellently equipped with engines, gear boxes, etc., kept in sections for demonstration purposes, and the students are trained by expert Europeans and other instructors. It is believed that no other motoring firm in India have a similar department.

The company have also a depot at 35-36, Ripon Street, where they maintain a fleet of taxi cabs.

In 1920 the firm was transformed into an Indian private limited liability company under its present title, and the capital was increased to Rs. 3,000,000. The Managing Director is Mr M Sevadjan, the General Manager, Mr P I Jackson, M C, A M I A E, and the Sales Manager Mr C H Shelton. The telegraphic address is "Diamoto," and Bentley's code is used. The company's Paris agents are Messrs K Sevadjan, 56, Rue Lafayette.

**PHELPS and CO , Civil and Military Tailors, Dressmakers and Milliners,
Old Court House Street.**

MESSRS PHELPS and Co , referred to by Kipling, Marion Crawford, and other writers, are well known in India as exponents of fashion in ladies' and gentlemen's apparel. Their Calcutta premises appear from the outside as two separate establishments, but these are connected internally, and form one of the most popular shopping resorts in the city. The entrance on the left leads into the sections for everything pertaining to the habiliments of the fair sex, where charming millinery and dresses are displayed in great variety. Not one of the beautiful models is duplicated, and they are, therefore, all the more attractive by their distinctive individuality. The woman of discernment and artistic perceptions seeks ever to manifest by her garments the irresistible psychology of the superlative and the new, blended by her own personality that has no duplicate in the inexhaustible infinity of life. To such the business of Messrs Phelps and Co appeals, for it always reflects the latest styles from the world's leading centres of fashionable decree.

A beauty and hair-dressing salon has lately been added to the departments for ladies, and is proving very popular.

Messrs Phelps and Co are equally famous as gentlemen's tailors and outfitters. The fact that they hold a warrant of appointment to the King-Emperor, when His Imperial Majesty visited

India in 1911, and also include amongst their large clientele practically every ruling chief, as well as a very great number of the nobility of India, is sufficiently indicative of the prominent



PREMISES OF PHELPS and CO , CALCUTTA.

and influential position they occupy in the tailoring trade.

The business was started in 1867 by the late Mr John Phelps, and is now carried on by his sons, Mr H R Phelps and Mr T J Phelps. Popular branches of it are established at Delhi and Simla.

**MANTON and CO , Gun-makers and Manufacturers of Athletic Outfits,
13, Old Court House Street**

UPWARDS of a hundred years ago no name was more celebrated in England in connection with the manufacture of firearms than that of Joe Manton, "The King of Gun-makers." It was a hallmark of the trade, a symbol of the greatest attainment that had, up to that time, been accomplished in weapons of precision. Officers home from India took back with them the excellent "Joe Manton" guns, and so greatly did the demand for the worthy gunsmith's productions develop in the Peninsula, that he sent out in 1885 his nephew, Frederick Manton, to establish at Calcutta a branch which has developed greatly in fame and scope of operations. Originally in Bentinck Street, it was removed about fifty years ago to its present quarters at 13, Old Court House Street. The front shop is stocked with everything that contributes to efficiency and comfort in the sporting field, and in all forms of outdoor recreations. Particularly noteworthy is the collection of wonderful old guns, including some with ingenious devices eloquently prophetic of the vastly improved weapons of to-day.

In the remarkable workshops behind and on the upper floors, many highly skilled experts are employed, including elderly men who have spent their lives in maintaining the reputation of the

firm in the manufacture and repair of firearms of every description, embodying all the devices that scientific ingenuity can suggest for the enhancement of precision and power.

Messrs Manton and Co are famous also as manufacturers of shot-gun cartridges. By means of their cartridge-loading plant, which is believed to be unique in Calcutta for its completeness and size, the firm are able to load daily without undue effort from 15,000 to 20,000 cartridges.

But guns and ammunition are not the only things made by Messrs Manton and Co. They are also well-known as manufacturers of all kinds of fishing tackle, which they send throughout the world. The great variety of their fly hooks is really remarkable, and their workmanship, like that of all Manton products, is an exemplification of the superlative.

Messrs Manton and Co have at 74, Tiljala Road, a private range which is greatly appreciated by their customers for tests and practice.

The proprietor of the business is Mr A J Brown, who has been connected with it throughout his career, and who is related to the original founder. The firm's telegraphic address is "Rifling," and the codes used by them are the A B C 5th edition and Bentley's.

PLUMMER BROS and CO , Timber Merchants, etc , 7, Hare Street

TIMBER generally forms one of many classes of importations of the ordinary merchandise business, but Messrs Plummer Bros and Co , who have been established since 1921, specialise in it



**BUILDING CONTAINING OFFICES OF
PLUMMER BROS. and CO.**

so much that they are the leading firm in that connection in Calcutta. Most of their supplies come from Burma, such, for instance, as Puar hadoe, Pynma, Padauk, Tankkyan, Thinvan Eng Dwani, Thikadoe, Thinjadrn, Kennymn, and Thityu. The firm also deal in American pine, Oregon fir, Californian redwood, and ship large quantities of timber to London.

Messrs Plummer Bros and Co are also operating as general commission merchants and are agents for

Perrins, Ltd , London
Ibbotson Bros & Co , Ltd , Sheffield
The Ruberoid Co , Ltd , London
District Chemical Co , Ltd , London
Allen Liversidge, Ltd , London
Aspinall's Enamel, Ltd , London
Crownshaw Chapman & Co , Sheffield
McEwen, Denby & Hart Briggs, Ltd , London
The Feroke Tile Works, Feroke, S I
The Gahagan Paint & Varnish Co , Ltd , Bombay
The "Flexoid" Leather Cloth Factory, Bombay

The business was founded by two brothers, Messrs H L and E I Plummer. The latter died in November, 1926. Prior to starting the business both brothers were for sixteen and nineteen years respectively with Messrs Geo Henderson and Co , Ltd , who are reviewed on page 65. The telegraphic address of the firm is "Woodford," Calcutta, and the codes used are the A B C 4th, 5th and 6th editions, Bentley's and Marconi International.

VALVOLINE OIL CO , B-5, Clive Buildings

THE products of the Valvoline Oil Co are so much in use in Calcutta and the great industrial centres of the Orient, that some information about the company and the reason of its remarkable success will add to the completeness of these reviews of local commerce and industry. In the sixties of last century Dr John Ellis, the American discoverer of the process of manufacturing lubricating oil from crude petroleum, was one of the founders of the Valvoline Oil Co , which was formed to exploit his discovery. Dr Ellis is now President of that company, which has developed enormously. It has three refineries containing every improvement known to the refining industry. Two of them are in the Pennsylvania oil fields, close to the only supply of paraffin base crude oil, while the other is at Edgewater, N J , located there for the convenience of the company's large export trade.

Valvoline oils are made from 100 per cent best Pennsylvania crude oil, and the difference in cost is more than offset by the fact that they last longer, lubricate better, and leave no residuum on the friction surfaces.

The company claim that they are in an unique position among refiners because they control their oil from the well to the consumer, and users of Valvoline oils obtain two important advantages through this policy. They are able to purchase Valvoline oils at a lower price than would be

possible if middlemen's profits had to be included in the selling price. They need never fear that inferior oils will be supplied under the Valvoline mark if they give their orders to the company, or to their specially appointed agents. No one else can supply genuine Valvoline oils, as, with the exception of motor oils, the company never supplies them for resale.

The head offices of the Valvoline Oil Co are at Wellington Buildings, The Strand, Liverpool, and 165, Broadway, New York, and they have branches throughout the world.

The head office for the East is at Calcutta, and it controls branches at Bombay, Madras, Rangoon, etc. Among the many indications of the thoroughness with which the Valvoline Oil Co operate may be mentioned the fact that the same at the head office at Calcutta, as elsewhere, includes trained engineers able to render expert advice in all matters relating to machinery, and the best methods of its operation and up-keep. The General Manager for the East is Mr F Wharton, who is an engineer of long and extensive experience, and under his enterprising direction the interests of the Valvoline Oil Co are extending throughout the Orient. The telegraphic address of the company is "Valvoline," Calcutta, and they use all the standard codes.

**ROBERTS, McLEAN and CO , LTD., Engineers and Merchants,
Mercantile Buildings, corner of Lal Bazaar and Bentinck Street**

MESSRS ROBERTS, McLEAN AND Co , LTD , have built up a very important and useful business—one which contributes very much to the security of buildings of every description against the risk of fire, and ensures their speedy salvation when the dreaded flames leap with lightning rapidity to destroy. In that connection the firm are sole agents in India for Messrs John Morris and Sons, Ltd , and Messrs John Morris (Firesnow), Ltd , of Manchester, whose celebrated fire extinguishing appliances are to be seen in all kinds of structures throughout the world. Their remarkable patent "Firesnow" is an artificial snow charged with carbonic acid gas for extinguishing fires. It is the result of considerable research work and experience in fighting the most difficult kinds of fires—oil and chemicals. Fires hitherto inextinguishable are now easily and instantly put out with "Firesnow," and with perfect safety to the operator. Two harmless dry powders, dissolved in water, make the two charging solutions. The moment these solutions come in contact, on operation of the extinguisher, they expand eight times their own volume, at the same time imprisoning the carbonic acid gas which is generated. It is due to this combined action that "Firesnow" acts on a twofold principle—it kills the flames with carbonic acid gas and smothers the fire with a thick fireproof covering, which also prevents re-ignition.

The vivid display given by the London Fire Brigade at the Wembley Tattoo thrillingly demonstrated the extraordinary efficacy of the Morris "Firesnow" appliances by extinguishing in a few minutes flaming petrol over a considerable area.

Messrs Roberts, McLean and Co , Ltd , are also very large importers of belting and kindred materials, and are agents for the following:

Ajax Fire Engine Works, New York, Chemical Fire Engines
Dennis Bros , Ltd , Guildford, Trailer Fire Engines
Lewis & Tylo, Ltd , Gripoly Mills, Cardiff and London, Manufacturers of "Gripoly" and other Beltings
Rossendale Belting Co , Ltd , Bradford, Hair and Cotton Beltings
D J MacDonald, Ltd , Dundee, Jute Mill Stores
Bullivant & Co , Ltd , London, Wire Ropes
The Atlas Metal & Alloys Co , Ltd , London, Anti-friction Metals
The Belting Manufacturing Co , London, Belt Dressings
Graton & Knight, Ltd , London and New York, Leather Beltings, etc
Fox & Williams, Manchester, Mineral Fusible Cement
E Brooksbank & Co , Ltd , Manchester, "Exol" Grease, etc
The Dundee Boiler Covering Co , Dundee
J Walker & Co , Ltd , Packings and Jointings
Rocklight Boiler Fluid Co , Liverpool
Witte Engine Works, Kansas, Oil Engines
Taylor Instrument Companies, Rochester, N Y , Temperature Recorders, etc
Keystone Pulley Co , Darlington, British All-Steel Pulleys
L B Halliday & Co , Ltd , Huddersfield, Dyes
Selling Agents Bengal Galvanising Works, Calcutta, Galvanised Buckets and Hollow-ware

The business was started in 1919 by Messrs S F Roberts and G C McLean, who were for many years previously with the firm of Balmer, Lawrie and Co , Ltd , and branches of it are established at Bombay, Karachi, Delhi, Lahore, and Cawnpore. The telegraphic address is "Roblean," Calcutta, and the codes used are Bentley's, A B C 5th edition, and private.

MITSUMI and CO , General Merchants and Commission Agents, 100, Clive Street

THE history of the celebrated house of Mitsui is interwoven with the history of Japan right back to the fifteenth century. It forms one of the most interesting stories of commercial development in the land of the Rising Sun, where it has exerted great influence and power. The Mitsuis have their headquarters at Tokyo, and the sphere of their operations in the economic world of Japan is so vast that it is impossible here to give anything like a comprehensive survey of it.

The undertakings of the Mitsuis, however, are divisible into three different departments, viz , Mitsui Ginko (banking department), Mitsui Bussan Kaisha, Ltd (foreign and domestic trading department), Mitsui Kozan Kaisha (mining department).

Messrs Mitsui and Co , incorporated more than fifty years ago in Japan as Mitsui Bussan Kaisha, Ltd , employ thousands of people, have branches at all the chief seaports of the world, and are

engaged in every department of trade. Their well-known cargo steamers sail on every ocean.

Messrs Mitsui and Co established their first office in India at Bombay, and they became established at Calcutta in 1906. They have also sub-branches at Rangoon and Karachi.

At Calcutta Messrs Mitsui and Co are largely engaged in general trade, handling extensively jute, gunnies, shellac, sugar, metals, ore, seeds, rice, chemical manures, silk and woollen goods, beer, dye-stuffs, etc. They are agents for

Taisho Marine & Fire Insurance Co , Ltd
Tokyo Fire Insurance Co , Ltd
Nippon Fire Insurance Co , Ltd
Tokyo Marine & Fire Insurance Co , Ltd
Union Insurance Society of Canton, Ltd

The manager of the Calcutta branch is Mr R Tamaki. The firm's telegraphic address is "Mitsui," Calcutta, and the codes used by them are the A B C 5th edition, Scott's 10th edition, Bentley's, A 1, and private.

**COOKE and KELVEY, LTD., Jewellers, Gold and Silversmiths, Watch and Clock Makers, etc.,
20, Old Court House Street**

THE establishment of Messrs Cooke and Kelvey, Ltd, conveys indefinable impressions of the past from the psychometry of beautiful and artistic things in an old-fashioned setting. What pur-



**PREMISES OF COOKE and KELVEY, LTD.,
CALCUTTA**

pose it served before 1858, when the firm began their activities there, may be left to the imagination. The date of its construction could not be ascertained. Around the quaint one-storey building must have pulsed the wild excitement of the Indian Mutiny. During recent years Calcutta has become transformed by the erection of magnificent lofty structures, but here and there are still left interesting reminders of the long ago, and the emporium of Messrs Cooke and Kelvey, Ltd, is one of the most attractive of them.

Above the entrance is what the firm consider the most reliable clock in Calcutta, on which the eyes of countless millions of trusting people have looked with unswerving confidence. Up the front steps of the premises must have tripped, in Victorian days, ladies in their crinolines to inspect the glittering assortment of jewellery and gold and silver articles, and to leave, in all probability, with more extensive purchases than their finances warranted. The rich and greatly varied stock seems so different from the display in the ordinary jewellery store. It is a lure of the superlative in quality and workmanship, in design and intrinsic merit. The exhibition is exceedingly select and most effectively arranged in showcases and fittings worthy in every way of their precious loads. No wonder an Indian, who visited the shop in

1925, was so overcome by the glittering wealth that he swallowed one of the rings in a vain endeavour to hide his theft. Many persons must have broken the tenth commandment when viewing the superb goods supplied by Messrs Cooke and Kelvey, and it would be interesting to ascertain whether the firm have ever thought of the effects of their display in that connection. What a place theirs would be to loot, but perhaps the less said about that the better in these startling times. The great ones of India know well about Messrs Cooke and Kelvey—the firm have done so much for them in the past, made magnificent regalia worthy of a king's ransom, and the facilities and resources of their workshops are held always in readiness to improve upon past achievements, no matter how great, whenever an opportunity arises for so doing. Amongst the interesting articles which have from time to time been designed and manufactured by Messrs Cooke and Kelvey for special occasions are swords, belts, silver bedsteads, howdahs, state chair-challenge cups, shields, address caskets, etc., and mention must be made of the caskets presented to King Edward, when, as Prince of Wales, he visited Calcutta in 1875 and as King Emperor in 1905. Tower clocks are also a speciality of Messrs Cooke and Kelvey, Ltd, and many fine examples of this work have been executed and erected by them in various parts of India. They have also done much as contractors to Government, and have supplied and erected large station and office clocks to the different railways of the country. Racing and complicated watches are also a leading feature of their business, and they have for many years supplied the chronograph watches used by the Calcutta Turf Club for timing all important races.

In 1927 the firm was formed into a limited liability company. The managing director is Mr W Gordon Deeks, and the other directors are Messrs E Bibra and W Bruce Davidson, all of whom have been connected with the business for many years.

The firm have branches at Delhi, Simla and Lahore.

MAX STAUB, LTD, Exporters of Hides and Skins, 100, Clive Street

MESSRS MAX STAUB, LTD, are one of the largest firms in Calcutta engaged in the trade in hides and skins. Before the Great War Calcutta was the chief export market in the world for that merchandise. Its best customers were the Continent and the United States, and the closing of the Teutonic markets brought about a temporary crisis all the more serious because trade in Calcutta had practically fallen into the hands of German and Austrian firms. The influence of the war, however, led to its re-organisation under British control, but it has not recovered its pre-war dimensions. Amongst the contributory causes of this are the export duty and the agita-

tion amongst the Hindus against the slaughter of cattle. Owing to that agitation also, the pemmican industry, which formerly was in a prosperous condition, has practically ceased.

The business of Messrs Max Staub, Ltd, was established many years ago by the gentleman whose name it bears, and who is the managing director of the limited liability company, formed in 1921, indicated above. The manager is Mr J Bleck. The firm's office forms the Swiss Consulate. The telegraphic address is "STAUB", Calcutta, and the codes used are the A B C and 6th editions, Simplex, Bentley's, Lubbock's and private.

GRAND HOTEL, LTD , Chowringhee.

VAST indeed have been the changes that have occurred in Calcutta during the past few decades, but none more remarkable than that represented by the Grand Hotel, which occupies an area of five acres on the site of the old Theatre Royal and Mrs Monk's boarding houses of happy memories. The story of the rise and development of the Grand Hotel, that looms so largely in the perspective of local amenities, is the story of the ability and enterprise of the late Mr A Stephen. From Mrs Monk he purchased, away back in the old days, all her houses and the adjoining property, and developed them eventually into the great caravansary mentioned.

The Grand Hotel employs 730 persons, and 12 of them are engaged as guides for the guests, who would otherwise have much difficulty in finding their way about the huge building. It has 500 bedrooms, each with its own bathroom and sanitary arrangements on the most up-to-date system. The floors throughout the hotel as well as the bedrooms and corridors are of marble. It would be interesting to ascertain the mileage of the corridors, for it must be extensive. The hotel has four dining-rooms, accommodating 1,000 guests, and to each there is a kitchen with the latest equipments. In addition, there is an excellent banquet-room, seating 400 persons, where the local Rotary Club holds its weekly meetings, also private dining-rooms. One of the large dining-rooms is called the Buffet Royal. There are several ball-rooms, and the principal one has an area of 6,490 square feet, overlooked by a spacious and beautifully appointed balcony, seating 200 people. There are also palm courts, cosy corners, verandah, lounges, a ladies' room and rest rooms. The water supply is obtained from artesian wells on the premises hundreds of feet deep, and of a purity beyond question, which cannot be said for the local Municipal water supply. The water is pumped from the artesian wells up to 40 tanks on the roof of the great building, whence it is conveyed by gravitation throughout the establishment, for washing as well as drinking and cooking purposes. All the fruits

and vegetables used in the hotel are obtained from its own gardens, which comprise 200 acres under cultivation at Kalkota, 60 miles from Calcutta. The furniture and general appointments of the hotel are worthy of the most favourable reference.

**GRAND HOTEL**

The Grand Hotel has three orchestras, and on Wednesday and Saturday nights there are tea and dinner dances, and on Sunday there are morning concerts, which are greatly appreciated and largely attended. The hotel has likewise its own laundry, soda water factory, etc., and its arcade comprises no fewer than 40 different shops. It has also asphalt tennis courts which are roofed with canvas in the cold weather, and various entertainments are given there in the evenings. From the lofty roof of the establishment is obtainable one of the finest views of Calcutta.

The proprietors of the Grand Hotel own the adjoining Empire Theatre and Stephen's Mansions, also the Hotel Mount Everest at Darjeeling. The latter establishment has 150 rooms with baths and hot and cold water and modern sanitation, is open all the year, and is situated in an admirable position. The company also owns and operates the Grand Hotel Rockville at Darjeeling. The telegraphic address is "Grand" and the codes used are the A B C and Bentley's.

LYALL, MARSHALL and CO , Merchants and Agents, 25, Mangoe Lane

MESSRS LYALL, MARSHALL AND CO are amongst the largest exporters of shellac from Calcutta, and are also well-known in connection with their activities as agents for the following

Lancashire Insurance Co, Ltd
 Ambari Tea Estate
 Dehra Dun Tea Co, Ltd
 East Hopetown Tea Estate Co, Ltd
 Mokumpur Tea Estate
 Bunjari Tea Estate
 Herbertpore Tea Estate
 Raipur Tea Estate Co, Ltd
 Goruckpore Tea Estate
 Kowlagarh Tea Estate
 Udhwa Bagh Tea Estate
 Annfield Tea Estate, Dehra Dun

The firm are also managing agents for Carew and Co, Ltd, and the Indian Home Mission to the Sonthals Tea Estates.


The firm was started in 1841 as Lyall, Rennie and Co, and after various changes in the personnel it assumed its present designation in 1913, the partners being Mr J D Marshall and his cousin, Mr E H Marshall, who have been connected with it since 1902 and 1909, respectively.

The firm's London agents are Messrs Lyall, Anderson and Co, 16, Philpot Lane, E C. Their telegraphic address is "Ghat," Calcutta, and the codes used by them are Bentley's, Broomhall's, and the A B C 5th edition.

ROGERS-PYATT SHELLAC COMPANY, INC , 5, Clive Row

THE Rogers-Pyatt Shellac Co , Inc , are amongst the largest exporters of Indian shellac, practically all their shipments going to the United States, for their head office is at 79-81, Water Street, New York

The lac industry is one of the most ancient of the minor industries of India. Lac is a resinous incrustation produced by insects which swarm over the twigs of certain trees, suck up the sap, and give out an excretion which solidifies on contact with the air, a scale being gradually formed round their bodies. This process continues until the twigs are encased by the encrustation. In this form it is collected by the villagers and sold in the local country markets as "sticklac," from which the product known as shellac is manufactured.

There are many qualities of shellac, and those manufactured by the Rogers-Pyatt Shellac Co , Inc , under their marks "D C," "V S O," and , are well known throughout the world. Shellac is used chiefly for gramophone records, varnishes, hats, electrical appliances, etc. The Rogers-Pyatt Shellac Co , Inc , have their own shellac factories at Mirzapur and Wyndhangunj, and own also estates totalling about 1,500 square miles devoted to lac cultivation.

They are proprietors likewise of the Rooknurgahat Co , Mirzapore, an important concern in the shellac industry.

Mica is another Indian product in which the Rogers-Pyatt Shellac Co , Inc , are largely engaged. It is doubtful when mica was first discovered, but it has been used in India for decorative and medicinal purposes from time immemorial. It has been found in the wrappings

of the ancient Egyptian mummies, and the Greeks knew of it upwards of 500 B C. It is related too, that Columbus had his ships' lanterns fitted with it when setting out on his search for America.

The first shipments of Bengal mica are recorded as being made in 1863, but it was not until its unrivalled properties as an electrical insulator became known that the industry began to expand and assume some considerable importance in the mining and industrial world.

The rough mica is brought from the mines to the surface and split into sheets about one eighth of an inch in thickness, which are subsequently tied in bundles of about 40lbs each. The course of preparation of this rough mica consists in trimming, sorting, grading, and splitting. As the value of the films depend on their being uniformly thin and free from torn or cracked pieces, it is evident that close supervision is required at all splitting factories, as there may be upwards of 5,000 films in a pound, and even a comparatively few thick films in a case will seriously affect the value.

The Rogers-Pyatt Shellac Co , Inc , have been established in the United States for many years, and their activities contribute considerably to the paint manufacture of that country, for they operate in conjunction with the great firm of J C Gillespie and Sons, the largest importers into America of the ingredients for paints, oils, and varnishes, including wood-oil, the wonderful product of the tungyu tree of North China.

In 1920 the Rogers-Pyatt Shellac Co , Inc , opened their branch at Calcutta, and give employment on their estates to some thousands of people.

HARNACK and CO , Civil and Military Tailors, Shirt-makers and Gentlemen's Outfitters, 10 and 10/1, Old Court House Street

THE psychology of clothes is a subject of greater interest and importance than is revealed by the shallow thinking generally bestowed upon it. The influence of being faultlessly dressed has had greater consequences in human affairs than enters into the consciousness of the uninitiated or those indifferent to the subtleties of cause and effect. Lack of self-confidence on an occasion laden with potentiality may arise largely because of garments mediocre in cut or quality, or at variance with the accepted modes of fashionable decree. Messrs Harnack and Co , Calcutta's well-known fashionable tailors, provide a service in workmanship and materials well calculated to meet the most fastidious demands. Their establishment occupies a prominent position in Old Court House Street, and its artistic ensemble conveys that pleasing distinction and suggestion of superiority which is a concomitant of every high-class sartorial concern. There are some tailoring establishments so arranged and impressed with the

mentality of their operators as to occasion no surprise when the imperfection of their output is demonstrated. Others again are eloquent of the superlative conditions by which all the details of their organisation are directed. Amongst the latter must be placed the establishment of Messrs Harnack and Co , to whom is entrusted the making of garments of a large number of gentlemen in Calcutta, to whom excellence of fabric, as well as of cut and finish, is a matter of importance. The firm's assortment of materials, imported from the leading manufacturers, provides an extremely wide selection for suits for all occasions, and in the workshops are on the premises, customers have the satisfaction of knowing that their orders are completed under thoroughly hygienic conditions.

The business was established in 1889 by Mr J H Harnack, its sole proprietor, who personally superintends all its working details.

THE PLANTERS' STORES AND AGENCY CO , LTD , 11, Clive Street.

THE character of this large and well-known business is indicated by its title. The range over which the company's activities extend embraces everything pertaining to the tea industry of India, from the supply of odds and ends of things required on the estates to acting as managing agents, secretaries, and agents for the proprietary companies. The concern was formed in 1872 by a number of influential tea planters in the district of Dibrugarh, Assam, and was incorporated six years later under its present title. The extent to which it has developed may be indicated by mention of the fact that it has premises in Kidderpore, Calcutta, occupying an area of 102 acres. The great stores there have a loading and unloading platform and private railway siding, and through them pass enormous quantities of everything that can be imagined as necessary for tea estates, besides an infinity of other merchandise. The company's office and godown floor space in Calcutta amounts to 75,000 square feet.

Branches of the business are established at Chittagong, Assam, and Kuala Lumpur, F M S. The London office is at 17, St. Helen's Place, E C, the telegraphic address is "Planters," Calcutta, and the codes used are the A B C 5th edition and Bentley's. The general manager is Mr L. Herbert.

The company's prominence in the tea trade may be indicated as follows: Managing Agents of Barduar Tea and Timber Co, Ltd, Coohekoosie Tea Co, Ltd. Secretaries and Agents of Dheiakhat Tea Co, Ltd, Longview Tea Co, Ltd. Agents for

Bahjan Tea Co, Ltd
Behubor Co, Ltd
Deamoolie Tea Co, Ltd
Dekhri Tea Co, Ltd
Deundi Tea Co, Ltd
Doom Dooma Tea Co, Ltd
Itakhooli Tea Co, Ltd
Limboguri Tea Co, Ltd
Mazdehee Tea Co, Ltd
Pabboguri Tea Co, Ltd
Rajni Ali Tea Estates, Ltd
Rungli Ting Tea Estate, Ltd

Rupai Tea Co, Ltd
Shakomato Tea Estates, Ltd
Tara Tea Co, Ltd
Zaloni Tea Estates, Ltd
Mesri Tea Seed Co, Ltd
(Incorporated in England)

Amianaguri Tea Estate
Bashbaree Tea Estate
Basisti Tea Estate
Boisali Tea Co, Ltd
Buirpahal Tea Estate
Chandmani Tea Estate
Chapanallah Tea Estate
Choonsali Tea Estate
Halisabari Tea Estate
Hivedi Tea Estate
Hirajan Tea Estate
Jhiringhat Native Tea Co, Ltd
Longboi Tea Estate
Madarkhat Tea Estate
Madhupur Tea Estate
Madhuting Tea Estate
Numola Tea Co, Ltd
Noribund Tea Co
Oating Tea Estate
Radhabari Tea Estate
Rajabari Tea Estate
Rampur Tea Estate
Ramsa Hill Tea Estate
Rupabally Tea Estate
Sadisiva Tea Estate
Sirojini Tea Estate
Silonjan Tea Estate
Singumari Tea Estate
Stai Tea Estate
Tapasia Tea Estate
Taranagai Tea Estate
Thakurbari Tea Estate
Udalguni Tea Estate
Umatara Tea Co, Ltd
Dangri & Dhonjan Tea Seed Co

Besides the foregoing, The Planters' Stores and Agency Co, Ltd, are proprietors of Thandabari Collieries, Northern Collieries, Madandee Colliery, Secretaries of Central Dharmaband Coal Co, Ltd, Managing Agents of Calentlin Lead Mills, Ltd, Agents for Union Insurance Society of Canton, Ltd, Guardian Assurance Co, Ltd, London Assurance Co, Ltd, Triton Insurance Co, Ltd, and a large number of well-known British and American manufacturers.

ABRECHT and CO , Watch Manufacturers, 76-18, Radha Bazar Street

No country in the world is more famous for its watches than Switzerland. Messrs Abrecht and Co are a Swiss firm, and are amongst the largest importers of watches in the Indian Empire, where their supplies are used by every class of its swarming millions. Messrs Abrecht and Co's business was started in 1885 in the same insignificant looking premises at 16-18, Radha Bazar Street which form their headquarters, but since that date the firm's trade has grown immensely, and they have branches at Bombay, Rangoon, and Chaux de Fonds, Switzerland.

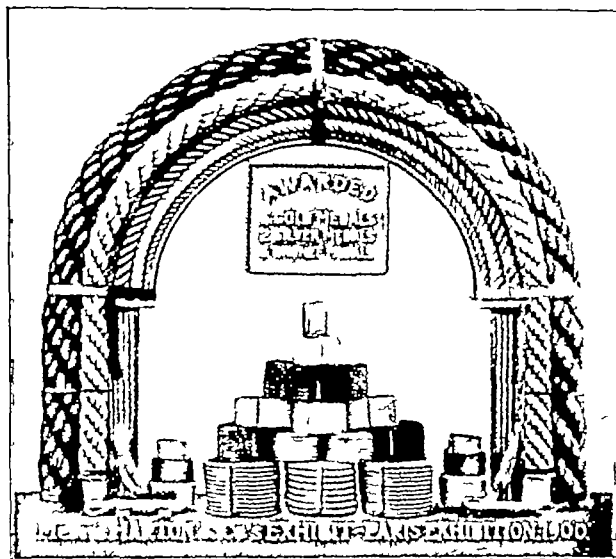
The appearance of the Calcutta establishment is very deceptive, and the large wholesale trade transacted there would probably astonish people unacquainted with the status and influence of the

firm in the watch trade. Besides the watches made specially for them in some of the best factories in Switzerland Messrs Abrecht and Co are agents for the celebrated Omega, Tavanne and Cyma, and also for those of Messrs Courtois Frères, whose factory at Chaux de Fonds is the oldest of its kind in Switzerland.

As might be inferred, the watches supplied by Messrs Abrecht and Co are of very great variety, from the cheap examples at Rs 1-12 each up to magnificent time-keepers costing some twelve thousand rupees. Messrs Abrecht and Co test every watch supplied by them, and in their Calcutta premises no fewer than three to four hundred watches are thoroughly tested daily.

W H HARTON and CO , Merchants and Rope Manufacturers, Council House Street

MESSRS W H HARTON AND Co are the oldest rope-makers in India. Their business was in existence in 1780, as is proved by a notice in *Hickey's Gazette*, but under another name. It received its present designation when Mr W H



Harton took it over at the end of the eighteenth century. In 1812 Mr William Stalkartt, son of Mr Marmaduke Stalkartt, who was naval architect to George III, joined the firm, and from that time the concern was carried on by succeeding members of the Stalkartt family, the last of them being the late Mr J C Stalkartt, who died in 1927.

Messrs W H Harton and Co's rope is made from the celebrated Manila hemp, or abaca, as it

is known in the Philippines. The abaca plant is a product of the peculiar combinations of climate and soil conditions in these islands, where it flourishes exclusively. From the leaf stalks is produced the most valuable of all fibres for cordage, as is evidenced by the fact that rope manufacturers all over the world import abaca from the Philippines for making their best grades, which they call "Manila" rope, to indicate that it is made with abaca fibre. Extensive experiments made at the Bureau of Science at Manila to determine the tensile strength of abaca have demonstrated that some single filaments of abaca give an ultimate tensile strength higher than that of wire. Abaca is also highly resilient, elastic, and durable. The experiments show it to be far superior to any other fibre in these qualities.

Messrs W H Harton and Co's products are known throughout the world, and have been awarded no fewer than ten gold, silver, and bronze medals at various Exhibitions in India, Europe, and America, including a gold medal at the Calcutta Exhibition of 1922-23.

The firm are also manufacturers of painted tarpaulins, coated with their own special patented composition, also of railway wagon covers made from prepared canvas imported specially for the purpose from England. They carry stocks of sail canvas, bunting, flags, and general marine stores.

Messrs W H Harton and Co are agents for Red Hand Compositions, Ltd, London, and Bruton's Wire Ropes, Musselburgh, Scotland. Their telegraphic address is "Hartoneo," Calcutta, and their codes are the A B C 5th edition and Bentley's.

T E BEVAN and CO , LTD , "The London Musical Depot," Grosvenor House, Old Court House Street

THE people of Calcutta have every reason for congratulation in having at their service such an exceptionally comprehensive and up-to-date musical business as that of Messrs T E Bevan and Co, Ltd, whose handsome three-storey establishment, in the centre of one of the city's finest thoroughfares, is unsurpassed by any similar undertaking in the Orient. The interest and admiration of the visitor to this attractive emporium will be as much aroused by its spacious and ornate character as by its wealth of everything that science and art have produced for the expression of music in all its charming infinity.

The firm's experience of the Indian market is probably unique, and they are well qualified to speak with authority upon the subject of pianos in India, and to give practical advice and guidance to everyone who consults them in that connection. The manufacture of pianos for use in the different districts of India has been their life study. They understand the characteristics of each maker's productions, and can, therefore, supply instruments suitable for the climatic conditions of any district, with satisfaction guaranteed.

The business was founded in 1883 by Mr Thomas Edmund Bevan, who was trained in the construction and tuning of pianos in the factory of Messrs J and J Hopkinson, Ltd, who are amongst the leading piano manufacturers in London. Subsequently Mr Bevan had more practical experience with Messrs John Broadwood and Sons, Ltd, before he was selected from among a number of candidates to fill a position in a piano forte house in India. He landed at Bombay in April, 1878, and in February, 1883, was transferred to Calcutta. When his agreement terminated in the latter year, he started in business for himself under the title of T E Bevan and Co, "The London Musical Depot."

In 1913 the firm was converted into a private limited liability company, with Mr T E Bevan and his partner, Mr Lionel Inglis, as directors.

Whatever may be said of the undoubted justice that exists amongst many people in the old business house conducted by

lines is against the more modern, impersonal, and less responsible ventures of limited liability companies, Messrs T E Bevan and Co, Ltd, differ from the latter by reason of the fact that, as already indicated, they are a private company, and the shares are limited to the employees. When the connection is severed the shares must be given up for purchase amongst the remaining employees, so that a personal service for the good of the company and the benefit of its customers is always maintained, thus realising the ideal of the founder, to build up a worthy business and share its success with his co-workers.

**J D JONES and CO. and J D JONES and CO, LTD, Merchants and Agents,
Clive Buildings, 8, Clive Street**

THE business of Messrs J D Jones and Co was established in 1893, and in 1924 several departments of the firm's activities were taken over by a limited liability company formed for that purpose, and entitled J D Jones and Co, Ltd. This company is one of the largest concerns in India devoted to the mica trade. The principal use of mica is in the manufacture of electrical machinery. The invention of micanite, a sort of cardboard made of splittings, built up with a shellac cement and consolidated under pressure, put a value on all the smaller sizes of mica which had previously been discarded as valueless. Micanite can be moulded into any desired form and is, therefore, capable of being used in a greater variety of ways than the block mica in its natural state.

A very considerable quantity of clear block mica is used in condensers of wireless telegraph installation, for stove windows, incandescent-gas chimneys, gramophone diaphragms, and other purposes.

A small quantity of waste mica is pulverised and the resulting powder is used as a lubricant,

Messrs T E Bevan and Co have always avoided any policy they would be unwilling to have publicly known, and the steady development of their business is the result of their constant endeavours to exemplify perfection in musical merchandise, sale methods, and service. They make a speciality of repairs and the rebuilding of pianos and all musical instruments, and transact a large wholesale as well as retail trade in everything associated with musical merchandise. Their cable and telegraphic address is "Bevanco," Calcutta.

other portions are converted into efficient lagging for steam pipes and boilers.

Messrs J D Jones and Co, Ltd, are proprietors of the Grayite Mica Works, Howrah, which is the only undertaking of its kind in India. Grayite is a composition used for lagging boilers, and is a great non-conductor of heat. Messrs J D Jones and Co, Ltd, are also proprietors of the Impervo Paulin Factory, Howrah, and are sole agents and representatives of

Canadian Hart Products, Ltd, Hamilton, Canada
(manufacturers of carborundum specialties)

Cape Asbestos Co, Ltd, Guildhall Annexe, 23, King Street, London, E C 2

Addressographs, Ltd, London, E C

J Bennett Heyde & Co, Manchester

Mava, Ltd, London, E C

Thos C Warley & Co, Philadelphia, U S A

Dakin Bros, Ltd (Dakin's Creasol), London

Messrs J D Jones and Co are general merchants and managing agents for J D Jones and Co, Ltd, Thermic Steel Co, Ltd, Calcutta, and the Eastern Rubber and Asbestos Co, Ltd, Calcutta. Their European correspondents are Messrs J D Jones and Co (London), Ltd, Bristol House, Holborn Viaduct, London, E C 1

G F PLAYFAIR and CO, Ship-chandlers, Engineers, and Contractors, 27-7, Waterloo Street

In the romantic days of the sailing ships it was generally found that the stores catering to their requirements had as their principals retired marine captains. In these more prosaic and strenuous times the vocation of the ship-chandler has lost much of its former characteristics, and the stocks of goods that used to be kept for the "white wings of the sea" have been largely replaced by steamer necessities, such as are supplied in great variety by Messrs G F Playfair and Co, who, while still stocking everything that the sailing ship might need, specialise in asbestos, canvas and metallic packings, Klinger's packing, "Klingerit" steam jointing, reflex gauge glasses and rings, tube brushes, pump leather cups, rubber and metallic valves, corrugated jointing rings, crystal soda, boiler composition, "Apexior" boiler compound, boiler zinc plates, rubber insertion, wire and

Manila rope, paints, files, manganosite paste, Crompton's atmospheric ash hoist cups, waste, cordage, raw and boiled oil, turbine fireproof ash-bags, etc, etc.

The business was established in 1903, and was taken over in 1917 by its present proprietor, Mr H S Reece, a practical engineer of long and extensive experience on land and sea. Accordingly since his advent the sphere of the firm has been greatly extended, and now embraces everything pertaining to the manufacture of structural steel work, tanks, tank staging, coolie huts, tea factories, bungalows, etc, etc. Indeed, there is nothing associated with general engineering which Messrs G F Playfair and Co are not prepared to undertake. Their telegraphic address is "Godder," and their codes are Bentley's and A B C 5th edition.

JESSOP and CO , LTD , Structural, Mechanical, Electrical and Civil Engineers, 93, Clive Street

MR HENRY JESSOP, one of the founders of the business of Messrs Jessop and Co , Ltd , was a bridge builder formerly associated with the Butterley Iron Co , and he began his activities in India in 1815. At that time the art of iron-bridge building was but in its infancy, and it was only when road traffic assumed large proportions by the development of industries and the increase of population that bridge building began to be practised on a great scale on scientific lines. Mr Jessop served his apprenticeship when iron was superseding wood and stone in the construction of bridges, to be replaced by steel when bridges of the modern type began to make their appearance.

Interesting old letters in the possession of the firm show that Mr Jessop was engaged in building bridges for Indian rulers. By 1820 the firm of Jessop and Co was in full swing, Mr Henry Jessop, with his brother George, having taken over the old-established ship-building works on the site of their present offices in Clive Street, not only as bridge-builders, but also as iron-founders and general engineers. According to Phipps, "Papers relative to ship-building in India," the plans and engine for the first boat built in India propelled by steam were brought out by Mr Henry Jessop in 1819, and the boat was built at Lucknow by his assistant, Mr Wm Trickett. The engine is "said to have been of excellent workmanship, and to have given the boat a speed of 7 to 8 miles per hour." Vast, indeed, have been the changes that have since occurred in the world's engineering and machinery, and year after year each new invention and improvement was exemplified in the evolution of Messrs Jessop and Co's ever-changing and increasing plant, until to-day their works contribute considerably to the engineering and kindred facilities and resources of Calcutta.

In 1889 the firm was formed into a limited liability company. Thereafter their trade in the importation of iron, steel and machinery began to extend very rapidly in combination with their general engineering activities. Accordingly, Messrs Jessop and Co , Ltd , erected in 1890, in Grierson Road, Howrah, a structural engineering establishment which was enlarged from time to time, and into it in 1910 was transferred the plant from their old Phoenix Works in Clive Street. The expansion since attained there may be indicated by the fact that the premises now cover an area of 16 acres, with a railway siding from the East Indian Railway, a river frontage of 800 feet, a road frontage opposite Howrah Station of 900 feet, and another outlet by private road to Cullen Place, Howrah. Branch works have been established at Jamshedpur and Dum Dum. The capacity of these works, besides a very large output of Swadeshi manufactures, comprising steam engines, steam pumps, jute, hide and fodder presses, pulleys, and mill gearing and all kinds of machinery, is about 500 tons of iron castings monthly and 3,000 tons of structural steel

Messrs Jessop's structural output comprises all the everyday class of work of this kind, and they specialise in steel bridges, buildings, well casings, jetties, leaf houses, etc , and the more intricate work where a high order of technical and designing skill is required.

Meanwhile in 1901 Messrs Jessop and Co , Ltd , during the industrial expansion for which Lord Curzon did so much, laid down a works at Garden Reach for the construction of rolling stock for the growing Indian railway system. Owing to railway developments in the neighbourhood, it has since been transferred to Dum Dum. The capacity of that establishment under favourable conditions of working is 100 broad-gauge main line State railway standard covered goods wagons per month, or the equivalent in other types of wagons.

In 1917, when the War had entered a new phase, the Government of India was faced with extraordinary and unique difficulties. The enemy's submarine war on merchant shipping and the heavy demands made by our campaign in Mesopotamia resulted in a great shortage of tonnage. This shortage could not be made up from home or from America, and the problem of making good the required tonnage in India was insoluble so long as steel plates were not to be obtained. As with ships, so it was at last with steel plates for ship-building, the demands elsewhere far exceeded the supply, and there was a serious chance of India being starved out altogether in that connection. Under these circumstances, and with things looking more and more difficult in the future, Messrs Jessop and Co , Ltd , undertook a contract for the fabrication and erection of 15,000 tons of structural steel work for extension to The Tata Iron and Steel Works, and for that purpose constructed in four months another establishment at Jamshedpur, where they were able from the commencement to turn out 1,000 tons per month of fabricated steel.

Besides their extensive engineering activities Messrs Jessop and Co , Ltd , are very large suppliers of everything pertaining to metals, machinery, tools, and building material. The site of their old Phoenix Works, extending from Clive Street to Strand Road, and occupying a gross area of 45,000 square feet, comprises a vast store heavily stocked with these materials. That area also includes the firm's head office, a portion of which is still as it was when the business was started in the far distant past.

Messrs Jessop and Co , Ltd , are agents for a large number of famous British firms, all of whom are in the front rank in their particular spheres. Branches of the business are established at Rangoon, Bombay, Madras, Lucknow, and Bombay. The London office is at 42, Gresham House, Old Broad Street, E.C.2. The company's telegraphic address is "Relapse," Calcutta and all the standard codes are used.

DODGE and SEYMOUR (INDIA), LTD., Manufacturers' Representatives, 9, Waterloo Street

In former times it was thought necessary that an overseas merchant required to be not only a good man of business, but also a statesman, it is evident that all the higher faculties of the mercantile profession must still more be called into requisition when imports and exports have increased so enormously, when markets are very much larger and more numerous, competition so much keener and more varied, the problems to be solved more complex, and the whole range of affairs so immensely widened. In a business, for instance, like that of Messrs Dodge and Seymour (India), Ltd, who are concerned with general merchandise of every description, there is scope for the application of discriminating knowledge in the selection of such commodities as long experience has proved eminently suitable to the manifold requirements of the Indian Empire. They represent about 100 of the leading manufacturers in the United States and Canada, including such well-known concerns as

The Westinghouse Electrical International Co of America
Hudson & Essex Motor Car Co
Parker Pen
"Champion" Blower & Forge
Deming Pump Co

Palm Olive Soap
Libby, McNeill & Libby
National Carbon Co, Inc, New York
American Eveready Flashlight Co
Stanley Rule & Tool Co
Stanley Works
Koko-Kola Co
"Canada" Dry Ginger Ale
Pond's Cold Cream
Sloan's Liniment (W R Warner & Co)
M B Squibbs, Dental Creams and Preparations
Standard Textiles of America
Champion Spark Plug Co
Raybestos Brake Lining Co
Western Clock Co
Seth Thomas Clock Co
Dagater Hosiery Co
Eagle Hosiery Co
Ipswich Hosiery Co

Messrs Dodge and Seymour (India), Ltd, are representatives of Messrs Dodge and Seymour, Inc, established for more than twenty-eight years, whose headquarters are at New York, and who have branches and agencies throughout the world, including Bombay, Karachi, Madras, Lahore, Cawnpore, Delhi, and Rangoon. The telegraphic address is "Excinco" for Calcutta and the other offices, and the codes used are the Acme, Bentley's, and private

THE ALUMINIUM MANUFACTURING CO, LTD, 14, Clive Street.

THE ALUMINIUM MANUFACTURING Co, LTD, has, since its formation, devoted its attention to further developing in India the use of aluminium in a thousand and one applications suited to people existing in the main under totally different conditions from those prevailing in Great Britain. Today aluminium is handled in every town and village throughout the peninsula in enormous quantities. In every bazaar may be seen rows upon rows of aluminium milk-cans, degchies, handies, katories, kettles and so on to an extent which is gradually pushing the older brassware into the background. The company's business is rapidly expanding in pace with the growing popularity of aluminium for every household use. The factory, situated a few miles outside Calcutta, in the old historic cantonment of Dum Dum, at present gives employment to about 600 persons under the supervision of skilled European experts, and is equipped with a plant embracing the most modern machinery which offers no limit to the variety of forms into which the metal can be worked as new applications and uses are found in this interesting market.

No attempt has been made to actually produce the metal itself in India. The company is solely engaged in manufacturing finished articles from sheets, ingots, circles, and other so-called semi-finished forms of the light metal imported from the United Kingdom. The production of aluminium on a commercial scale requires cheap electric power for the decomposition of the ore. India possesses abundant water-power resources together with extensive bauxite deposits from

which the silvery white metal may be produced, and no doubt at some future date a new industry will be developed in this great country similar to that which has been built up at Foyers and Kinlochleven, Scotland, and other parts of the world.

To the Indian the advantages possessed by aluminium over brass, earthenware, and other vessels, are many, but the primary one perhaps lies in the ease with which it may be kept clean. It is not surprising, therefore, that aluminium has largely displaced all other metals for the manufacture of articles in which cleanliness is primarily essential. The dilute organic acids which occur in a great variety of foodstuffs have very little action on aluminium, and the compounds formed are absolutely harmless to the human system. Aluminium does not rust like iron, nor form verdigris as on copper and brass utensils, nor does it chip as in the case of enamelled ware. Its lightness holds an added attraction, and these properties, combined with its excellent heat conductivity, thereby involving economy in time and fuel, renders it better than any other material for the manufacture of cooking vessels.

Aluminium is a comparatively newly known metal. It was not discovered by Davy until the middle of the last century nor produced on a commercial scale until the perfecting of the electric dynamo. Like other new things, aluminium during its early introduction into the daily life of India, was looked upon with the suspicion characteristic of this great country. Unheard of in the days of the evolution of the religious laws and rites, it was not included in the list of metals pro-

hibited for cooking and similar uses, and no restriction on that account has stood in the way of its wider use throughout Hindustan. But there has still been the work of convincing, for the people are mostly illiterate, and suspicious that the process of cooking in aluminium is in no way injurious to the health.

Price, an all important consideration to the Indian buyer, has done much to popularise the use of aluminium utensils, which are far less costly than the brassware formerly used for the same purpose. It has, therefore, been possible to introduce the use of aluminium utensils into the homes of the poorer classes who hitherto have only been able to afford earthenware pots, which, though cheaper, have but a short life as they are so readily broken.

Amongst British and Indian troops, and indeed those of all countries, the use of aluminium has also vastly extended, and the reduction in weight of the cooking utensils of a regiment has been taken as 75 per cent or more as a result. What this means may be judged by the fact that before

the introduction of aluminium eight mules were allotted to each regiment, or one for each company, while under the new conditions one mule can carry the cooking utensils of three companies, leaving five mules for the regiment available for other duties if necessary.

The company also specialises in the production of modern light alloy sand and die castings which have made such rapid progress in the motor, electrical, and other industries. At the present stage of the industrial development of India, however, it is for the bazaars that the company chiefly caters, and its trade in this direction runs into many hundreds of tons of utensils annually. It is interesting to note that the scrap resulting from the company's manufacture is recast into bangles, and other small forms of adornment.

The managing director of the company is Mr Ernest E. Batten, B.Sc., A.C.G.I., M.Inst.Met. The telegraphic address is "Bauxite," and the A.B.C. code, 6th edition, is used.

ALFRED HERBERT (INDIA), LTD, 13, British Indian Street

MESSRS ALFRED HERBERT, LTD, of Coventry, have contributed very considerably to the machinery equipment of all kinds of industrial establishments throughout the world. Their business in India, established in 1906, eventually developed so greatly that in 1921 a separate but subsidiary company was formed under the title of Alfred Herbert (India), Ltd, which, organised for the speediest supplies and the most skilful service, has since kept pace with the great development in every branch of industry in the Indian Empire, and has branches at Lahore, Bombay, Madras, and Rangoon. The headquarters are at Calcutta, under the supervision of the managing director, Mr E. D. Mitchell, who has been with Messrs Alfred Herbert, Ltd, since 1906, and in his present position since 1923.

The company's staff includes highly skilled technical engineers, who report on and advise in con-

nection with all kinds of machinery problems, demonstrate the advantages of the great variety of the Herbert specialities, and superintend their installation. Besides their offices and showroom in British Indian Street, the company have large godowns in Strand Road.

The range over which the company's activities extend is exceedingly comprehensive, and embraces everything associated with general machinery and accessories for engineering, railway, and motor workshops, dockyards, aeroplane construction, etc.

In addition to being the agents for Messrs Alfred Herbert, Ltd, Coventry, they also act as agents for many prominent machine-tool makers.

The telegraphic address of the firm is "Machine," Calcutta, and the codes used by them are Western Union, A.B.C., Licher's, and private.

ASHWORTH, ASPINWALL and CO, General Merchants, 38, Strand Road

THE enormous range in the patterns of cotton piece-goods is best seen in those that are in great popularity throughout India and its dependencies. The supply of these materials forms a large section of the business of Messrs Ashworth, Aspinwall and Co., and the vast difference in the patterns and chromatic effects of the fabrics supplied by them is not the result of haphazard production, but represents the varieties which long experience of the customs and idiosyncrasies of the people have shown as being the most suitable and popular.

Messrs Ashworth, Aspinwall and Co. are also general merchants and managing agents of the Otomatic Service Co., whose remarkable patent for sealing punctures in pneumatic tubes is being utilised everywhere with great appreciation.

The firm are also agents for James Taylor and Co. (Merchants), Ltd, W. H. Seales and Co.,

Ltd, Bradford, Whitworth and Mitchell, proprietors of Tricolene products, Joseph Crosfield and Sons, Ltd, Warrington, soaps, S. R. Adams and Co., St. Helens, Chemicals Establishments, D. J. Van den Broek, Brussels, asbestos sheets, G. F. Arnould and Co., Brussels, paints and varnishes.

The business was established about the beginning of the present century under the name of James Taylor and Co. (Merchants), Ltd, and was taken over in 1926 by a new company entitled Ashworth, Aspinwall and Co., Ltd, formed for that purpose. Since the advent of the latter firm the concern has developed considerably. The directors are Messrs William Aspinwall and J. M. Seales. The telegraphic address is "Iron," Calcutta, and the codes used are the A.B.C. 6th edition, Licher's, and private.

HAROLD and CO , LTD , Importers of Musical Merchandise of Every Description, Dalhousie Square.

ESTABLISHED in 1847, Messrs Harold and Co , Ltd , are the oldest firm in their line in Calcutta and pioneers in the local trade in musical merchandise. Indeed, it was with Messrs Harold and Co that the founders of the principal concerns of the same kind in the city received their first training in India. When the business was started the firm's stock was very different from what it is to-day, and the manufacturers of the instruments of those days, doubtless, never dreamed of the vast improvements and inventions which were to be effected in later years for the expression of the most spirituelle of arts. Messrs Harold and Co , Ltd , are importers of musical merchandise of every description and deal with the requirements of an entire military band orchestra as readily as they do with those of their customers wanting the latest song or dance, or the aspiring student engrossed in obtaining the instrument of his or her fancy, from a mouth organ to a piano by such famous makers, for instance, as Blüthner, Erard, Brinsmead, Brasted, Schiedmeyer and Sohne, Allison, Boosey, and Besson, and the band instruments of Messrs Hawkes and Son and Boosey and Co , Ltd , for whom Messrs Harold and Co , Ltd , are agents in Calcutta.

The firm have a staff of experts engaged in

repairs of all kinds, and the work they do in that connection extends throughout Northern India. Impressive examples of how pianos and organs not specially built for the tropics, as are those supplied by the firm, deteriorate are shown by many instruments received at their workshops for repairs. The successful manner in which the latter are executed is an object lesson in specialised ability. The wood used by them is teak, which is immune from the ravages of insects and climatic deterioration. Tuning as well as repairs is, of course, a feature of the firm's activities.

Messrs Harold and Co , Ltd , devote special attention to gramophones and are the only European agents in Calcutta for "His Master's Voice" records and machines.

The business, which gives employment to about fifty persons, has been carried on since its inception in its present premises, which were damaged by the earthquake of 1902, and rebuilt on a better scale in 1906. In 1920 the firm was formed into a limited liability company, the Managing Director then being Mr W S Cole. That gentleman was succeeded in 1924 by Mr C L Seymour, who after his apprenticeship with Messrs Collard and Collard, of London, joined Messrs Harold and Co , Ltd , in 1908.

BARLOW and CO , Merchants and Commission Agents, 37, Strand Road

THE business of Messrs Barlow and Co , Calcutta, established soon after 1860, is a branch of Messrs Thomas Barlow and Bro , Manchester and London, which was founded by the late Mr Thomas Barlow, and is now carried on by his two sons, Sir John Emmott Barlow, Bart , and Mr Frank Barlow, J P. Messrs Barlow and Co have been connected with the development of the Indian tea industry for many years, and now act as agents for various tea estates controlled by the partners in the firm of Thomas Barlow and Bro. Messrs Barlow and Co , Calcutta, are agents for the Brae and Chingoor Tea Estates, Ltd , which owns the Chingoor group of estates in Cachar and the Loongsoong group of estates in Assam (the Brae group of estates is in Ceylon). Messrs Barlow and Co are also agents for the Castleton Tea Estate in Darjeeling and the Borholla Assam Tea Co , Ltd. They are amongst

the leading members of the Indian Waste Tea Collecting Agency, and are largely actively interested in the buying of waste tea for its exportation for chemical purposes. Messrs Barlow and Co have, in addition, large bazaar interests, and sell extensively piece-goods, iron, steel, metals, and all classes of hardware and general merchandise. They are appointed representatives of Messrs W K and C Peace, Ltd , Sheffield, and the Summerlee Iron Co , Ltd , of Glasgow. The firm's correspondents are Messrs Thomas Barlow and Bro , Post Box No 15, Manchester, and "Ceylon House," 49-51, Eastcheap, London, also Barlow and Co , Shanghai, Singapore, and Kuala Lumpur.

Messrs Barlow and Co's telegraphic address is "Cephissus," Calcutta, and they use the standard codes.

JOHN CATLOW and SONS, LTD , Manufacturers and Shippers, 11, Clive Street

THE great piece-goods trade of India has one of its best-known representative firms in Messrs John Catlow and Sons, Ltd , in whose mills, Radford, Rose, Anchor, Sudelside, and Olive, at Darwen, with some 2,700 looms and giving employment to about 1,000 persons, are manufactured all kinds of cotton piece-goods.

Messrs John Catlow and Sons, Ltd , have been shipping these materials to India for upwards of thirty years, but did not open their branch at Cal-

cutta until 1921. That establishment is under the direction of Mr Harold Catlow, son of Mr James H Catlow, senior partner of the firm, assisted by Mr G H Hacking.

Messrs John Catlow and Sons, Ltd , at Calcutta, are agents for jute and cotton mill stores of best British manufacture. Their telegraphic address is "Talon," Calcutta, and the codes used by them are the A B C 4th and 5th editions, Bentley's, Whitelaw's, and private.

**HARMAN and CO., Civil, Military, Naval, and Diplomatic Tailors and General Outfitters,
12, Government Place**

THERE are few firms in the British Empire with a finer record of sartorial service and supplies than Messrs Harman and Co. Established in the reign of William IV, they have always been noted for their skilful exemplification of high quality materials and workmanship and correct interpretation of every detail of fashion. When they started business masculine attire was much more elaborate than it is to-day, and on the firm's stationery is an illustration of a gentleman of that distant period arrayed in apparel that affords a striking and artistic contrast to the much less ornate, although more utilitarian, garments of the *genus homo* of the present time.

The business was started in Tank Square, which soon afterwards received its present name of Dalhousie Square. In 1866 the firm removed to their present well-known establishment, almost opposite to Government House, where they have, during the succeeding decades, upheld the best English tailoring traditions. The character of the trade transacted is evident at once by the absence of everything that would detract from the rigid and exclusive specialisation governing the business, both in regard to its administrative and executive departments. No ready-made suits are obtainable in that resort of excellent apparelling and high-class workmanship, but while unsurpassed in the making of clothes for a discerning and fastidious clientele, Messrs Harman and Co

are, and have always been, specially famous for their activities as military and naval tailors. They have always been regarded as authorities in connection with the correct details of British uniforms, military or otherwise. They made the very elaborate uniforms of the fourteen heralds at Lord Curzon's Durbar in 1902, and some of these uniforms are now preserved in the Victoria Memorial Calcutta. In their establishment may be seen samples of buttons and badges of every British regiment and the medals and orders of the Empire. They receive regularly every Army Order, in order to keep in line with the latest changes and details of military dress, and with their extensive resources in gold and silver laces and the finest cloth of every pattern and texture necessitated by their versatility of service and supplies in apparelling for the military, naval, and diplomatic services, Messrs Harman and Co are always in a position to execute orders with the utmost promptitude and with the knowledge and skill that have accrued through decades of specialising in such work. All orders are fulfilled in the firm's premises and under conditions of the utmost cleanliness and hygiene.

Many changes have naturally occurred in the personnel of the firm during its long existence. The manager is Mr E. J. Mitchell, who has been in India since 1902, and joined the firm in 1915.

J BOSECK and CO, LTD, Jewellers and Enamellers, 17-3, Chowringhee

MODERN jewellery is eloquent of the progress that has been attained not only in artistic culture, but also in mechanical and scientific achievements, and the comprehensive stock in the premises of Messrs J. Boseck and Co, Ltd, illustrates much of the ingenuity, the art, and the skill necessary for such productions. The large assortment glistens with suggestions for anyone contemplating gift giving, and an inspection of it is instructive as well as interesting as showing what local workmanship can achieve in everything associated with the manipulation of gold, silver, and precious stones. Messrs J. Boseck and Co, Ltd, are particularly noteworthy for their remarkable skill in the formation of jewellery embodying coloured enamel, and the beautiful examples of their work

in that connection cannot fail to elicit the enmiums of connoisseurs in such goods.

The large assortment of clocks and watches is also worthy of notice—timepieces that may be depended upon for all time, for wall, shelf, pocket, and wrist, while the firm's skill in repairs, engraving, and everything pertaining to the trade is a matter of more than local fame.

The business was established in 1875 by the gentleman whose name it bears, and who died in 1890. In 1922 the firm was formed into a private limited liability company. The managing director is Mr G. H. Webb, who has been connected with the concern for many years. The other directors are his son, Mr G. M. Webb, and Mr H. P. P.

COBBOLD and CO, LTD, Merchants and Agents, Mercantile Buildings, 8-12, Lal Bazar.

THIS business was established by Mr H. R. Cobbold about the beginning of the present century, and was formed in 1923 into a limited liability company of which the managing director is Mr J. M. Wood.

The firm are specialists in the supply of all kinds of equipment for tea estates, and are agents for

Yale Blocks and Locks
Ramsay Pumps
Rhino Brand Rubber Belting

Sawyer Canvas Belting
Galton's Leather Belting and Tires
American Saw Mill Machinery
Atkins Saws
Buffalo Forges and Rice Hullers
Mallory Logging Equipment
Ironshire Hill Co. (Ropes and Tires)
Rhino Brand Picking Straps and Mill Saws

The firm's telegraphic address is "Mercer" Calcutta.

JARDINE, SKINNER and CO , Merchants and Agents, 4, Clive Row

CERTAIN episodes in the story of some of the old firms in Calcutta can be better remembered by their synchronising with great historical events that have had vast influence on the world's history. Thus, when Messrs Jardine, Skinner and Co removed in 1869 from the small office in Strand Road where they had been established since the foundation of their business in 1842, the year of that transition marked the opening of the Suez Canal. Until then Messrs Jardine, Skinner and Co, like their contemporaries, had received their cargoes from home and despatched their shipments of Indian produce by the picturesque sailing vessels via the Cape of Good Hope. The greater facility afforded to the merchants of the Orient by the advent of the steamer, which was at that period already beginning to contest the supremacy of sail, was enormously enhanced by the Suez waterway. Accordingly, the new era which it introduced marked also the beginning of a corresponding expansion in the activities of Messrs Jardine, Skinner and Co, whose business is now one of the largest in India. The limited company

had not come into existence until thirteen years after they opened their little Strand Road office, and while the Companies' Act of 1855 and the improved one of 1907 created great commercial advantages and facilities, nevertheless the old style of firm, like the one under review, is more in accord with traditions and customs of the past when the spirit of high adventure in Eastern trade was accompanied also by the glamour of possible attainment not so characteristic of these days of strenuous competition and huge limited liability undertakings, lacking the personal equation attraction of the private partnership.

Amongst the foremost interests controlled by Messrs Jardine, Skinner and Co are jute mills, tea estates, timber forests, and coal mines. They are large importers of Manchester piece-goods, exporters of gunnies and tea, and are agents for various insurance and shipping companies. Their telegraphic address is "Jardines," Calcutta, and their London agents are Messrs Matheson and Co, Ltd, 3, Lombard Street, E C

FUNDUS COMPANY, LTD , Bosch Service, 58, Free School Street

THE FUNDUS COMPANY, LTD, formed in 1925, are sole agents in India for the famous Bosch firm of Stuttgart, Germany, whose magnetos, plugs, and other products are in great and popular use all over the world wherever motors can go.

The premises of the Fundus Company, Ltd, at 58, Free School Street, are excellently equipped for providing skilful and comprehensive service, not only in connection with Bosch goods, but also for all other magnetos, etc, the business being the

only specialised undertaking of the kind in India. The manager is Mr P Schmidt, who has spent very many years in the great Bosch works, and is an authoritative expert in all matters relating to the company's service and supplies. The deputy manager is Mr F Rohebein, who likewise is long experienced in the same connection.

The telegraphic address is "Bosservice," Calcutta, and the codes used are Bentley's, Mosse, and private.

FRANK ROSS and CO , LTD , Dispensing Chemists, Wholesale and Retail Druggists, 25-7, Chowringhee

HAPPINESS may be summed up tritely as the knowledge of where things are, and the judicious taking advantage of that knowledge. For every evil there is a good, for every disease there is a cure, and the restricted realisation of these facts is the result of inadequate knowledge or mental or physical inertia. The stock in a modern pharmacy, especially in one like that of Messrs Frank Ross and Co, Ltd, catering to cosmopolitan requirements, represents the materialised knowledge and experience of the ages in the treatment of physical ills. Everyone is, more or less, acquainted with the patent medicines which have attained so enormous a range that in their multiplicity it is difficult to select the specifics best calculated to effect the desired results. The stock in the handsomely appointed establishment of Messrs Frank Ross and Co, Ltd, is exceptionally comprehensive, and it may be said to be composed of the remedies of all nations, in which, however, the pharmaceutical productions of America predominate.

The perfumery of all countries is specialised in by Messrs Frank Ross and Co, Ltd, with care-

ful study and experience along the channels of universal favour and disfavour in everything pertaining to differentiation of sweet scents, so that their assortments in that connection are exceptionally varied—delightful odours wrested from the souls of flowers that bloomed in sunny gardens beyond the seas, and were imprisoned by famous manufacturers in dainty bottles that would be worthy acquisitions even without their fragrant contents.

Not the least commendable feature is the care exercised in the dispensing departments, which are in charge of qualified experts.

The business was established in 1902 by the gentleman whose name it bears, Mr Frank Ross, in partnership with Sir Robert Laidlaw, and developed so well that the firm was formed in 1919 into a limited liability company with Mr Ross as Managing Director.

The wholesale department is in Corporation Place, and there are also branches at 81, Park Street and Commercial Row, Darjeeling. The latter branch has an aerated water factory, equipped with an up-to-date plant of electrical machinery.

**H E. METZKES and CO , Manufacturers' Agents for All Kinds of Scientific Instruments,
7, Esplanade East**

IN the premises of Messrs H E Metzkes and Co is held a stock of scientific instruments that embraces all laboratory and hospital requirements and demonstrates the wonders of modern optics very impressively indeed. The microscope, for instance, has for many decades occupied the position of an indispensable element in the medical practitioner's equipment. Progress in medical science is making more and more exacting demands upon the precision with which research is conducted and upon the quality and accuracy of the means employed. It is, therefore, not difficult to understand that since the introduction by the great firm of Ernst Leitz, Wetzlar, in 1913, of binocular microscopes adapted for higher magnifications, these have met with ever increasing appreciation. The use of both eyes in microscopic observations, the stereoscopic effects resulting therefrom, and the ability to see in solid relief which goes with it, render much easier the recognition of the finest

details, and afford an enhanced means of visualising the inner structure of an otherwise flat object. In addition, seeing with both eyes has great hygienic advantages, since it obviates fatigue to the eyes, which is injurious to the sight and conducive to unreliable results.

These advantages are sufficiently striking to account for the popularity of the Leitz microscope, for which, and for all other goods made by the celebrated firm, Messrs H E Metzkes and Co are sole distributors in India, Burma, and Ceylon.

Messrs H E Metzkes and Co are amongst the most recent firms in Calcutta, having only been established there since the end of 1926, but they have already made excellent progress in the marketing of their highly specialised goods. Their telegraphic address is "Mikroleitz," Calcutta and the codes used by them are the A B C 6th edition and Mosse.

**H P MAITRA and CO., LTD , Railway Contractors, Cigarette Distributors, Commission Agents,
Coal, Lime, and Timber Merchants, and Planters, 3-6, Hare Street**

THERE is no combination of activities quite like that of Messrs H P Maitra and Co, Ltd, in Calcutta. They are, for instance, managing agents of Maihar Stone and Lime Co, Ltd, whose kilns, built in 1912, are situated at Maihar, on the East Indian Railway, about 96 miles from Jubbulpore and 137 miles from Calcutta. The Maihar lime is amongst the best stone limes of India, and is extensively used by the Government Public Works Department, district boards, railways, municipalities, and other public bodies, as well as by the leading architects, builders, and contractors of Bengal and the United Provinces. It is also used largely on tea gardens and indigo and sugar estates for manuring purposes, and it constitutes one of the principal ingredients in the manufacture of the different manures and fertilisers.

Messrs H P Maitra and Co, Ltd, are secretaries of the Timber Traders, Ltd, which was formed in 1919 with a capital of five lakhs of rupees, and sells more soft woods than any other

concern in India, if not in the East. Timber Traders, Ltd, has a saw-mill at Balliaghatta.

Messrs H P Maitra and Co, Ltd, are also coal merchants. Their coal is obtained from collieries in the Jherriah fields, and is sold in whole sale quantities to the Government and to mills.

The firm have a very valuable asset in the monopoly which they enjoy for the sale of cigarettes in the independent kingdom of Nepal. They supply a certain brand from the manufacturers in India, and the latter, according to agreement with Messrs H P Maitra and Co, Ltd, are precluded from making any of the same kind for any other firm.

The firm was founded in 1906 by Mr H P Maitra and converted into a limited liability company in 1923. The managing director is Mr P Forbes-Smith, who has been connected with the business since 1914. The firm's telegraphic address is "Maitraph," Calcutta, and the code used is the A B C 5th edition.

SPENCE'S HOTEL, LTD , 4, Wellesley Place

EVERY hotel has, or should have, a distinctive individuality which is very much contributed to by its position. Wellesley Place, where Spence's Hotel is situated, although in the heart of the foreign business section of Calcutta, is quiet and select, and is pleasantly reminiscent of the days of long ago when there were no hooting motor cars and life was much more leisurely than in these strenuous times. At one end of Wellesley Place, about half a furlong distant from Spence's Hotel, is the vast Dalhousie Square around which are great mercantile offices and banks, and the traffic that pulsates there from morning till night makes the neighbourhood of Spence's Hotel peaceful and

quiet in comparison. The other chief hotels in the city are on busy highways, where tram and motor vehicles of all kinds speed on their noisy way.

Spence's Hotel was founded in 1876, first in Hastings Street, and a few years later the present building was opened. In 1910 the present proprietary company was formed by Mr G F Bowyer, who holds the bulk of the shares and is managing director. The hotel has roomed for only 85 persons, but that fact will do little to appeal to many people who dislike hotel life. The establishment has been enlarged and improved from time to time, and its former reputation for quaint nooks and adaptations that imp-

character quite its own. All the rooms are very nicely furnished, and almost all of them have their own bathrooms with hot and cold running water and modern sanitation. The cuisine of Spence's is very good, and the service first-rate in every way. There is a spacious dining-room for residents of the hotel and another large one for the public, besides a series of small charming private dining-rooms that are exceedingly popular. Access to the latter is obtained direct from Wellesley Place, which increases their convenience and privacy immensely.

Spence's Hotel is four storeys high, and an electric lift connects all its floors.

Mr Bowyer is also proprietor of the Bristol Hotel, which he took over in 1900. That establishment is situated in a very central position in Chowringhee Road, overlooking the beautiful Maidan, and is chiefly a restaurant, which is very popular. Access to it is by a broad staircase leading straight from the thoroughfare to the first floor of the building.

R B RODDA and CO , Gun and Rifle Manufacturers, 2, Wellesley Place.

IN view of the great shooting facilities provided by India it is not surprising to find in Calcutta an establishment like that of Messrs R B Rodda and Co, the well-known gun and rifle manufacturers, whose productions have been the means of great achievements not only throughout India, but in all parts of the world. Messrs R B Rodda and Co's premises at 2, Wellesley Place are exceedingly interesting and instructive in regard to the remarkable development of modern firearms. The four old cannon with which the exterior is made picturesque and unique are mute reminders of the crude weapons of the past, and in great contrast to those of wonderful precision and power displayed in such profusion in the interior of the establishment. The firearms in that splendid assortment range from tiny revolvers, beautifully and richly made, up to huge elephant guns. Particularly noteworthy are the "Improved Paragon" and "Roddalite" electric sight for night shoot-

ing, of which Messrs R B Rodda and Co are the sole manufacturers, and which are spoken of very enthusiastically by those who have used them under the severest tests.

Messrs R B Rodda and Co also supply all kinds of sporting goods and ammunition. Behind the front section of their premises are their workshops, where a staff of about 40 experts are engaged in repairs and all other work pertaining to the trade.

Messrs R B Rodda and Co's factory is at 24, Whittall Street, Birmingham. Their branch at Calcutta has been established since 1830, and was located in Dalhousie Square until 1900, when the firm removed into their present much better premises in Wellesley Place. The senior partner is Mr F B Pike, and the other partners are Mr A W Hodges and E B Leeson. The firm's telegraphic address is "Roddaco," Calcutta.

GEO. BEAVER and CO , Importers of India-rubber for Engineering and Mechanical Purposes, 87a, Clive Street

THE story of the development of rubber is one of the romances of modern commerce and industry, and the uses to which that indispensable material is now put have a range altogether beyond that which was thought possible a few decades ago. Its vast utility for engineering and mechanical purposes is nowhere in Calcutta better demonstrated than by the business of Messrs Geo Beaver and Co, which is specialised entirely for the supply of sheets, washers, valves, cord, tubing, ball-valves, buffers, rods, door mats, delivery and suction linen hose, vulcanite, ebonite, and packing goods of every description.

Established in 1899, Messrs Geo Beaver and Co are the largest importers of rubber goods in Calcutta, and they supply various Government departments in India and Burma, the principal railway systems, shell and arms factories, jute and other mills, collieries, Municipalities, and District Boards, etc. Behind their offices in Clive Street are their godowns, where a stock is held which demonstrates very impressively the enormous variety of uses to which rubber is put.

Amongst the great assortment mention may be made of vulcanised india-rubber and canvas hose, air and water valves, also "Karmal" high-pres-

sure packing for steam-power service from 80 to 120 lbs, which, being a self-lubricating substance, does not require oil, tallow, nor any other kind of grease.

Messrs Geo Beaver and Co also supply the best English leather belting, oak tanned and well shrunk, woven hair, cotton, laminated and other beltings suitable for jute mills, brattice cloth and cast-steel hooks and iron.

The firm are agents for Bishop's adamite gauge glasses, which resist the highest steam pressure, the greatest heat, and all the variations of temperature. They are also agents for Small and Parker, Ltd, Henham Vale Works, Manchester, manufacturers of the famous "Grooved Roko" belting and "Karmal" packing. Tests as to their superiority over all others have been given by the Admiralty authorities at the Royal Dockyard, Portsmouth, Messrs Vickers, Sons, and Maxim, Ltd, and by several commanders and engineers of the leading shipping companies of the world.

The founder of the concern, Mr Geo Beaver, retired in 1910, and Mr D A Dalling, the present proprietor, has been connected with it since that year.

**MORRISON and COTTLE, LTD , Manufacturers of Saddlery, Boots and Shoes , Taxidermists, etc.,
8, Esplanade East**

THE psychological effects of the manner in which footwear is made are very much greater than is registered by the consciousness which concerns itself only with the immediate physical discomfort, if any, but senses not, or but faintly, the remarkable results, direct or indirect, which taper off into countless sub-conscious channels from continual pressure, where pressure should not be, and also from the absence of that sensation of welfare in the pedal extremities always associated with good footwear made and balanced in conformity with Nature's laws and requirements in all that relates to the human foot. That fact is behind all the operations in the manufacture of the celebrated Manfield boots, made at Northampton, and for which Messrs Morrison and Cottle, Ltd., are agents, and is also a governing factor in their own activities as boot and shoe manufacturers. In contradistinction, however, to the machinery adopted in the manufacture of footwear in Europe, America, and other parts of the world, Messrs Morrison and Cottle, Ltd., operate almost entirely by the old traditions of hand labour that have been handed down from generation to generation with meticulous regard for the superlative in every detail of workmanship and material. How different is the hand-made boot and shoe, in the estimation of the discerning, from the product of mass production by machinery! Most people, indeed, nearly all people who wear boots and shoes, would much prefer to have their footwear made to measure in the Morrison and Cottle way than having to accept the best they can obtain in machine made goods in standard sizes for the million. The huge assortment of lasts kept by the firm is eloquently indicative of the trade which they transact.

But boots and shoes of every description for civil, military, field, and stable use form only one phase of their business, for they are saddlery and

harness makers and manufacturers of bags, trunks, and leather goods of all kinds, while as taxidermists they have established a reputation that extends afar.

The business, which gives employment to 100 Indians and a staff of 6 European expert overseers, was established in 1884 by Mr William Mason, and was carried on by him for ten years, until through financial difficulties it was taken over by the now defunct Bank of Delhi, from whom it was acquired by Messrs E. J. Morrison and J. Cottle, English expert saddlers and harness makers, who had been employed by one of the local firms no longer in existence. In two years and eleven months Messrs Morrison and Cottle satisfied their bank in full. Since then the business has prospered well, and to that laudable achievement the fact that the partners personally supervise all the working details has contributed very materially. Another interesting point is that a member of the European staff (no half-castes are employed) becomes after probation a shareholder of the company.

Mr Cottle has been a member of the Legislative Council, and is an Honorary Magistrate of Calcutta.

It may also be mentioned that Mrs Cottle is one of the most highly esteemed ladies in India, who for many years she has taken a prominent part in connection with various activities for the public welfare, especially ambulance work. On the outbreak of the Great War she returned to England in order to offer her services in that connection, but was sent back to India, where she collected seven lakhs of rupees for the same good end. Mrs Cottle was honoured with the Delhi Durbar Medal, the Kaiser-i-Hind Medal, the O B I., and the C B E., and is now Lady of Grace of the Order of St John of Jerusalem.

LEON SAUBOLLE and CO , 7, Wellesley Street

In no branch of skilled activity is fine production more dependent on careful attention to innumerable details than in printing and its allied crafts. In that connection it is pleasurable to turn from consideration of the prosaic articles of ordinary merchandise to the beautiful results accruing from the service and supplies of Messrs Leon Saubolle and Co., who occupy a leading position in Calcutta in connection with the importation of materials of all kinds necessary for the printing trade, not merely in its ordinary necessities but in those high phases that lift its possibilities to the pinnacles of artistic achievement. Through the medium of this firm local printers are provided with the best facilities for the production of good workmanship in the speediest and most satisfactory manner.

Messrs Leon Saubolle and Co have been estab-

lished since 1910. They opened their present premises in Wellesley Place in 1914, and have since added to their services all kinds of repairs to motor vehicles, as well as to printing machinery. In that connection they specialise in only first-class workmanship, not cheap, shoddy jobs. Among the well-known firms for whom Messrs Leon Saubolle and Co. are agents are

Rexine, Ltd
John Haddon & Co
Timson, Bullock & Barber, Ltd
Morris Ashby, Ltd
J. S. Darwen & Co

and the new floor material, "Indurite," by the Dockers Bros.

The founder and proprietor of the firm is Mr Leon Saubolle. The type is set in the "Minerva," and the codes used are the ABC edition and Bentley's.

TRAILL and CO , LTD., Booksellers, Manufacturing and Importing Stationers, Printers, Bookbinders, 20, British Indian Street

LIKE some of the other firms in Calcutta, Messrs Traill and Co , Ltd , are housed in one of the old mansions where merchant princes of former days upheld the prestige of the British sahib with more emphasis and distinction than in these greatly changed times. The firm entered into possession of it in 1869, the year of the opening of the Suez Canal, which was of such vast consequence to the merchants of India and the entire East. That was an auspicious year certainly for a business like the one in question, for the new era which the great desert waterway inaugurated led to increasing demand for printing of every description, and in that connection Messrs Traill and Co specialised, as they still do, with ability that led to the continual expansion of their business. To-day that business, which gives employment to about 300 persons, is one of the most noteworthy of its kind in India. Besides executing printing of every description, including lithography, Messrs Traill and Co , Ltd , are large stationery manufacturers, bookbinders, map mounters, picture framers, rubber-stamp makers, etc.

They are printers and publishers of their famous diaries, of which they sell many thousands per annum. Traill's diaries in India compare with Lett's diaries in Great Britain. When they were first published in 1884 there were no diaries specially compiled for India. The great need in that connection was therefore well met when Messrs Traill and Co issued a small diary with one week to an opening, with English dates and corresponding dates in the Bengalee, Fuslee, Sumvat, and Mahomedan years, and compiled information suitable for India, thus becoming the pioneer diary publishers in India. Since that time the popularity of their diaries has steadily increased, and to keep pace with the demand Messrs Traill and Co , Ltd , have now a list of 50 various kinds of diaries, diary blotting pads, and calendar blocks.

Traill's diaries, containing an extraordinary amount of valuable and interesting information of India not found in other diaries, are published on November 1st, and to ensure this, it is necessary to commence printing in January of the preceding

year, so that it takes ten months to prepare a single edition. The whole edition runs into many thousands of copies and requires nearly three tons of paper and boards. Placed end to end the copies would extend one mile and a half. Placed one on top of the other they would reach a height of 365 feet (more than twice the height of the Ochterlony Monument at Calcutta), and when it is considered that some thousands of these diaries are small pocket sizes of about $4\frac{1}{4}$ in long by $2\frac{1}{4}$ in broad by $\frac{1}{4}$ in thick, the magnitude of a single edition will be better understood.

Messrs Traill and Co's operations as manufacturing and importing stationers are on a large scale. They have no fewer than 50 of their own water-marks, and as the minimum amount of paper made to each water-mark is 5 tons at one time, it can be understood how much is required by their business. During inspection of the premises the writer saw a sample of paper 30 years old, bearing one of the firm's water-marks, and that paper was almost as good in colour as the most recent imported.

The founder of the business, Mr D M Traill, who had been connected with missionary work, retired in 1896. In 1908 the firm was formed into a limited liability company. The Secretary and Manager, Mr W E Bishop, has been manager of the concern since 1898, and to his able control is due the very successful development it has attained. It was Mr Bishop who introduced into India the "T C" flat and vertical system of office files, and also the "Trailco" Loose Leaf System. No one is a more enthusiastic expert in connection with all forms of office equipment and organisation than he. He has evolved for his own work an extraordinarily clever and efficient system of management that reduces the number of his clerical assistants by quite two-thirds. So unique and effective is that system that he can turn up instantly the names and dates of business callers on him during the last quarter of a century, or more. The firm's telegraphic address is the appropriate one of "Stationers," Calcutta, and their code is the Western Union.

E R GRUEBER, LTD , General Merchants, 4, Lyons Range

CALCUTTA before the Great War was very different from what it has since become, and while there has been vast improvements and developments in buildings and general conditions, not a few persons would like to be back again in the old days when life was not so strenuous as it is now. There were not so many firms in Calcutta then, and amongst them was that of E R Grueber, whose business was founded in 1897, and was carried on very successfully until the outbreak of the war. In 1927 Mr Grueber resumed his local trading activities by forming a company under the style of E R Grue-

ber, Ltd, which is devoted to merchandise of every description. The principal imports are piece-goods and hardware, paper and sundries, Jute, gunnies, rice, and other Indian products are exported by Messrs E R Grueber, Ltd, a large proportion going to Java and Japan, where the firm have numerous connections.

Mr H Grueber looks after the interests of the business at Hamburg, and the manager at Calcutta is Mr E Heise. The telegraphic address is "Gruberevim," Calcutta, and the codes used are the A B C 6th edition and Bentley's.

THE CONTINENTAL HOTEL AND CAFÉ ROYAL, Chowringhee

THERE are many hotels throughout the world bearing the designation of the one indicated above, but probably few, if any, are more admirably situated than the well-known Continental Hotel in Calcutta. Opposite to the cenotaph, it overlooks the Maidan, the city's magnificent park of 3,000 acres, and from the front windows of the establishment excellent views are obtained of the Curzon Gardens, a portion of the Esplanade, Government House, Fort William, the charming Eden Gardens, together with a long stretch of the Hooghly River with its panorama of shipping. The excellent location of the Continental Hotel is also further enhanced by its being adjacent to the principal theatres and shops, and, in fact, right in the heart of Calcutta's fashionable centre for business and entertainment.

The Continental Hotel was established in 1874, but it was not until it was taken over in 1916 by its present proprietor, Mr Mackertich John, that it

may be said to have assumed its modern character. That gentleman was for eight years Secretary of the Grand Hotel, owned and operated by his uncle, the late Mr Stephen, and under Mr John's regime the Continental Hotel has undergone great improvement. In the impressive lounge hall, or palm court, is a large and exceptionally beautiful marble fountain. The ground floor sections include also the Café Royal, which is one of Calcutta's popular places for refreshments of all kinds, and where an excellent orchestra plays every night. The chief dining-room is on the upper floor, and is a noble apartment, richly appointed and capable of seating 150 guests. There are in addition public and private bars where choice brands of liquors are obtainable, and a billiard room with two Burroughs Watts' tables.

The Continental Hotel has 100 bedrooms, most of them facing the Maidan, and all have hot and cold running water and modern sanitary fittings.

LYON and LYON, LTD, Manufacturers of Firearms, 16-5, Chowringhee Road

THE trade of the gunsmith in Calcutta during recent years has been considerably handicapped by the strict regulations imposed by Government in connection with the possession of firearms. Nevertheless, the establishment of Messrs Lyon and Lyon, Ltd, is as popular and attractive as ever because of its large and exceedingly comprehensive stock of firearms of every description, ranging from the smallest automatic pocket pistol up to the most powerful and precise weapons yet invented for big game shooting. Figures speak with greater emphasis than the most grandiloquent words. Thus, in 1923, 1924, and 1925, the Government statistics for the importation of firearms placed Messrs Lyon and Lyon, Ltd, at the head of the European firms in Calcutta in that connection.

An eloquent indication of the high quality of their productions is afforded by the fact that they were awarded at the United Provinces Exhibition, Allahabad, in 1910, the following

Grand Prix for general excellence and variety of exhibits

Gold Medal for best double hammerless high velocity cordite rifle

Gold Medal for best double hammerless ejector gun

Gold Medal for best magazine high velocity rifle

Messrs Lyon and Lyon, Ltd, have been established since 1896, and have kept in line with every new invention and improvement in guns and kindred supplies. They are patentees of the well-known patent "Lethal" expanding bullet, of which considerably more than one million have been sold in India since its introduction, besides very extensive sales throughout the world. Judging from reliable information received from experienced hunters, two-thirds of the tigers and leopards bagged annually are accounted for with Lyon's expanding "Lethal" bullets. The "Lethal" is universally admitted to be unique, in that it possesses exclusive qualities which dis-

tinguish it from all others and in that it leaves a choke barrel a perfect sphere of solid lead and steel, the latter arranged so as to promote expansion from the impact of effective penetration only, thus obviating superficial wounds. With smooth bore weapons, speed, accuracy, and effective penetration are in proportion to the rotundity of the ball. The "Lethal" is the only bullet for use in choke or cylinder bore barrels indiscriminately that does not lose its form, or normal weight, though possessing those qualities for maintaining accuracy, penetration, expansion, and safety.

Messrs Lyon and Lyon, Ltd, supply also all kinds of other weapons, such as military, presentation, and Durbar swords, hog spears, tent pegging lances, knives, and sportsmen's requisites of every description.

In the firm's workshop are employed a staff of workmen equal to the most difficult work with which they can be entrusted. Accordingly the utmost confidence may be reposed in the manner in which repairs are performed there.

In 1922 the firm was formed into a limited liability company, the Governing Directors being Mr James Lyon, who founded the business, and Mr G P Shelton, who joined him in partnership soon afterwards, the other Director is Mr J Broughton.

Amongst the staff of European assistants is Mr D J Todd, recognised by the Government of Bengal as its firearm expert, and his great knowledge and experience are requisitioned in connection with court cases in which firearms have been used.

Messrs Lyon and Lyon, Ltd, have a private rifle range at Ballygunge, and its facilities are placed at the disposal of their customers for testing weapons. The firm's telegraphic address is "Lyonanlyon," Calcutta, and the codes used are A B C 5th edition and Bentley's.

ARLINGTON and CO , Jewellers, Silversmiths, and Electro-platers, 16, Government Place

LIFE has no joy like the joy which comes from that which is fresh and new. The old, the worn, is repugnant, and everywhere man emulates the activities of Nature in the transformation of all things into new forms and aspects. Electro-plating, for instance! What could be more exemplary in that connection than the magic processes which convert into shining beauty all manner of greatly worn things, with the shabby metal showing in ugly patches through the remnants of their original silvery surface. Messrs Arlington and Co have the distinction of being the first firm to introduce that work in India, and the extraordinary variety of articles which they have electro-plated since they commenced business in 1854 would, if assembled together, be as unique a collection, doubtless, as could be imagined. Spoons, forks, and the utensils of the Victorian homes would be matched with the beautiful harness decorations of the equipages of Viceroys, Governors, and the Indian royalties. As the years passed the trend of modern transportation methods received its first indication by the handle bars of cycles, and thereafter came the motor industry with its innumerable

electro-plated accessories. To-day the range over which the firm's electro-plating activities extend is most comprehensive, nevertheless, they specialise more particularly in such articles as are usually associated with the work of the silversmith, and their well-known improved method is guaranteed to stand the rough Indian wear for many years.

The firm have also attained distinction as manufacturing jewellers, silversmiths, watch and clock makers, and engravers, and are appreciated for their skill in the production of all kinds of sporting cups and trophies.

The business was transferred in 1900 from Dalhousie Square, where it had originally been established, to its present excellent premises in Government Place, opposite to Government House. It derives its name from the association of Lord Arlington with its formation, but soon afterwards it came into the possession of the Woodthorpe family, and for very many years it has been under the direction of Mr W Woodthorpe, who is assisted by his son, Dudley, and a highly skilled staff under the supervision of European experts.

ALEX BRAULT, General Merchant, Commission Agent, Banker, etc , 7-1, Wellesley Place

EMERSON has said that if a man can write a better book, or preach a better sermon, or make a better mouse trap than his neighbour, though he build his house in the woods, the world will make a beaten path to his door. The idea conveyed is the success of the superlative in whatever the effort may be, and it is demonstrated in innumerable ways by the extraordinary stock in the establishment of Mr Alex Brault. The remarkable variety of things obtainable from him is without duplicate in Calcutta, nor could there be, for Mr Brault is sole agent for many specialities, including

"Flamme Blue" Stoves

Ice Machine operated with fire and water

Fleury, Legrand Fire Extinguishers

Metz Solid Fuel

Individuality is certainly a distinctive feature of Mr Brault's business as well as of himself. Thus, for instance, he started in business in 1881 as a tailor, and continued as such till 1914, when he relinquished that trade and turned his attention to providing the public with articles of ingenuity and utility that solved many economic problems in new and unexpected ways of greater efficiency and satisfaction than could otherwise be possible. Besides, he is also a banker and an expert in premium bonds, in which he has dealt with marked success.

Tito Landi Lamps

"Froudiere" Patent Combination Safes

Motogodilles

J G BAGRAM and CO , Merchants, Insurance, Commission and Estate Agents, 14-2, Clive Street

THE sailing ships have departed forever, taking with them much of the glamour and romance of the sea. When the Hooghly River used to be picturesque with their shapely outlines and their lofty masts the business of Messrs J G Bagram and Co, established in 1855, was well-known amongst their captains, for the firm specialised in those days in supplying everything from a needle to an anchor. The business, however, has long been changed to meet the altered conditions of modern demands, and while operating still as general merchants, Messrs J G Bagram and Co's leading department is in connection with the sales of land and house property, in which they have built up an excellent connection. They

operate also as general commission agents, and are chief agents for the Great American Insurance Co of New York, and agents for the

South British Insurance Co, Ltd

Royal Exchange Assurance Corporation

Scottish Union and National Insurance Co

Great Eastern Life Insurance Co, Ltd

Commercial Fire and Marine Insurance and Eastern Estate Agency

Since the formation of the business in 1855 many changes have occurred in the personnel of the firm. The present sole proprietor is Capt T M Manuk, who became a partner in it in 1923. The telegraphic address is "World," Calcutta, and the codes used are the A B C 5th edition, Bentley's, and private

**DINSHAW and SORABJEE, Railway Catering Contractors, Wine and Provision Merchants,
8, Dharamtala Street**

THE handsomely appointed premises of Messrs Dimshaw and Sorabjee at 8, Dharamtala Street are quite in keeping with the firm's importance in the supply of groceries and provisions, wines, and spirits, as well as catering in all its branches. The premises are very much larger than is indicated by the front portion, and occupy an area of 12,000 square feet. Messrs Dinshaw and Sorabjee are known and appreciated throughout Northern India, as well as in Calcutta, but it is principally as caterers that they have attained greater distinction, for as such they are contractors to the Eastern Bengal, Darjeeling-Himalayan, and Bengal-Dooars Railways, along which they have no fewer than 27 branches.

At Parbatipur they have a large factory equipped with up-to-date machinery for the production of the highest quality of aerated waters of all kinds. The fact that Messrs Dinshaw and Sorabjee have held their railway contracts since their business was established in 1885 is eloquent of the satisfactory manner in which they carry through everything committed to their trust in that connection. They cater to all classes of people, including Royalty, Viceroys of India, Governors, etc.

The business was started in 1885. The proprietors, sons of the original founders now deceased, are as follows: Messrs R S and K S

Colah, sons of the late Mr Sorabjee, and Mr P D Bamjee, son of the late Mr Dinshaw. The firm's telegraphic address is "Dinsor," Calcutta, and they are agents for the following:

D & J McCallum's Perfection Whisky
Seager Evans & Co, London, Gin
Bouchard Aine & Fils, Beaune and Burgundy
Barton & Guestier, Bordeaux, Clarets
Spratt's Patent, Ltd, London, Incubators
E & T Pink, Ltd, London, Provisions
G & J Nickson & Co, Ltd, Liverpool, Hams and Bacon
A J Caley & Sons, Ltd, Norwich, Confectionery
Silva & Cosens, Ltd, London, Ports
C J Van Houten & Zoon, Weesp, Cocoa
A & A Crawford, Ltd, Leith, Whiskies
Wm Teacher & Sons, Ltd, Glasgow, Whiskies.
C Levine & Co, Glasgow, Whiskies
Mentendorff & Co, London, Bollinger Champagne
Francesco Cinzano & Co, Turin, Vermouth
Scholl & Hillebrand, Rudesheim, Rhine Wines
Woodhouse & Co, Malta, Marsala
Labbe Francois, Vouon, Liqueurs
Barnett & Elchagaray, Cognac, Brandies
Ch Jobit & Co, Cognac, Brandies
Engelhardt-Brauerei, Aktiengesellschaft, Berlin
Eiskocher Vertriebs Gesellschaft M B H, Berlin
Wrexham Lager Beer Co, Ltd, Wrexham
Amstel Brewery, Amsterdam

**LLEWELYN and CO, Funeral Furnishers and Directors, Sculptors, and Statuaries in General,
9 and 9-1, Waterloo Street**

No custom is more universal than that of raising monuments to the dead, and India is pre-eminent in the magnificent structures which are to be found throughout that ancient land, commemorating the great men of its wonderful history. Throughout India, too, are to be found the artistic enduring monuments which have been erected by Messrs Llewelyn and Co, the oldest established sculptors, general statuaries, and undertakers in the peninsula. Their story goes back to 1800, when a certain rajah in Northern India brought across the seas one Jenkin Llewelyn, a Welsh artist and sculptor, for the purpose of utilising his services in the production of a number of paintings and statuary work. On the termination of this engagement Mr Llewelyn removed to Calcutta, and began to practise his art on his own account. A special feature was made of monumental masonry, but progress was so disappointingly slow that two years later he entered into partnership with an undertaker named Simpson, under the style of Simpson and Llewelyn, which continued until 1812, when, owing to the death of Mr Simpson, the business took on its present designation of Llewelyn and Co. Various changes, of course, took place in the personnel of the firm during the succeeding decades, and in the latter part of the

year 1914, the business was taken over by its present owner, Mr James Reid, who has been connected with it since 1911.

The firm have always been noted for their activities as sculptors and general statuaries, and their showroom in Waterloo Street provides many beautiful examples of their skill in that connection. It is, however, at their works at 47, Benipuker Road, Entally, that a more accurate indication is given of how completely and comprehensively they operate. The beautiful Carrara marble, Aberdeen and Cornish granite, and other materials is there seen in course of formation into artistic statues and mural designs of every description. For that purpose there is an excellent plant of machinery driven by electricity.

As funeral furnishers Messrs Llewelyn and Co's activities are also on the most improved and up-to-date lines. Their manufacture of coffins ranges from the plainest kind up to oak, teak, and elm specimens exquisitely upholstered and finished in the richest of fittings. The firm introduced the motor hearse into Calcutta, and use also horse hearses. Their telegraphic address is "Llewelyno," Calcutta, and they use the A B C 5th edition code.

JOHNSTON and HOFFMANN, Photographers, 22, Chowringhee Road.

WHEN the business of Messrs Johnston and Hoffmann was started in 1880 the art of photography was still in its infancy in comparison with the remarkable development which has since been attained in the means and methods by which it is now carried on. The restrictions of the photographer of that period did not trouble Messrs Johnston and Hoffmann, for their undertaking was successful from its commencement, and they began to win a reputation for high-class workmanship which has solidified and expanded with the passing of the years. No firm of photographers in India has kept more in line with every new improvement and invention for the perfection of process and result than Messrs Johnston and Hoffmann, who operate in all modern processes. Their building, in which they have been since the formation of their business, is one of the old mansions of Calcutta, and many notabilities and persons of high

degree have passed through the spacious marble-floor entrance hall, and proceeded up the handsome broad staircase to the magnificent reception room adorned with splendid oil paintings, enlargements, and photographic studies of every kind, all examples of Messrs Johnston and Hoffmann's skill in every branch of their trade. The firm have great resources in backgrounds, and the many details that contribute to efficiency. In households throughout India their name is seen on portraits of exquisite style and fashion. The firm have the honour of appointment to H E Lord Irwin, Viceroy and Governor-General of India, and were similarly honoured by previous Viceroys and H E the Earl of Lytton, Governor of Bengal.

The founders are both deceased, Mr Johnston died in 1891, and Mr Hoffmann in 1921, and the business is now under the direction of Mr A D Long, who has been connected with it since 1905.

SMITH and WAKEFIELD, Specialists in China and Glassware, 30, Chowringhee

THE magnificent display of china and glassware in the establishment of Messrs Smith and Wakefield bears eloquent testimony to the great development which has been attained in the manufacture of such things in Europe, whence the firm's supplies are obtained. Not many decades ago their range was very much more restricted than it has since become, and to-day the infinity of pattern and quality in dinner and tea services, such as is demonstrated by Messrs Smith and Wakefield's attractive assortments, reflects individuality of taste and idiosyncrasy to a degree probably never thought possible in former times. Amongst their most noteworthy examples of English china are those of Aynsley, J and G Meakin, Salt and Nixon, Booth, Maddox, etc. Exquisite examples of Bohemian glassware, French cut-rock crystal, and other beautiful things, create many delightful surprises to people able to appreciate the excep-

tionally fine combination of art and utility which they embody.

Messrs Smith and Wakefield are the only firm in Calcutta specialising entirely in china, glass, and domestic hardware. The partners are Mr A J Smith and T A Wakefield. They started their business in 1909, and were the first firm to become established in the block wherein they have their premises. Their establishment at that time was comparatively small, and has since been enlarged very considerably to meet the requirements of the business. Mr A J Smith, it may be mentioned, has spent his entire career in the china and glass trade, and his extensive experience and knowledge of it enables him to sell his very alluring goods at prices which otherwise would be impossible. The firm challenge competition in their particular line with any other in India.

McDALE and CO, Manufacturers' Representatives and General Order Suppliers, 5, Dalhousie Square

THE campaign for the use of British goods in British possessions has much to substantiate it. In typewriters, for instance, the new Bar-Lock, with its wonderful improvements, is creating a remarkable record, and the fact that an order for 794 typewriters was given some time ago by the Stationery Office to the Bar-Lock (1925) Co of Nottingham to replace foreign and other machines is an eloquent indication of the merits of the new Bar-Lock. Amongst the many advantages of the Bar-Lock is that the paper carriage may be instantly removed by the operator without tools, and as easily replaced by the same or by an interchangeable carriage of different width. It is as easy to write with the new Bar-Lock on a penny stamp as across a sheet as wide as the average newspaper. The platens are interchangeable, and instantly removable. Various grades of platens can be supplied for correspondence, manifolding,

or stencil work if desired. The advantages of this feature are many, and prolong the life of ribbons and type.

The decimal tabulator is a standard fitting on every Bar-Lock Model No 17, making each typewriter a complete billing machine.

The sole agents in India and Burma for the Bar-Lock are Messrs McDale and Co, who have on their stationery, "Clean selling and efficient service after sales. Guarantee refund of money if service is unsatisfactory." Messrs McDale and Co have been established since 1922, and are agents also for the Associated Tobacco Manufacturers and the A P Jordan steel furniture. They have branches at Simla, Delhi, Lahore, Madras, and Rawalpindi. The proprietor is Mr G R Martindale. The firm's telegraphic address is "Twinrose," and their codes are the A B C 5th and 6th editions and Bentley's.

BOURNE and SHEPHERD, Artists and Photographers, Corporation Street

No photographic business in the world can be much older than that of Messrs Bourne and Shepherd, for although Wedgewood had some success in chloride of silver experiments, it was not until



PREMISES OF BOURNE and SHEPHERD.

1839, upon the discovery of Daguerre which introduced the camera, that any great practical results were obtained. Messrs Bourne and Shepherd began their activities in the following year, 1840. A few years later Talbot patented the calotype, by

which photographs were obtained on paper treated with a solution of silver iodide in potassium iodide, and the negative was arrived at. The wonderful development that has since taken place in photography has been continually reflected in the business of Messrs Bourne and Shepherd, whose artistic productions have, year after year, shown each new improvement and invention until now a state of perfection has been obtained that seems impossible to enhance. Photography in its highest phases, as exemplified by them, emerges from the plane of mechanical operations into a realm of art far beyond the commonplace of ordinary achievement. Messrs Bourne and Shepherd embody in their portraits all those pleasing details which, while apparently casual, are the result of their exceptionally long and close study of the best means and methods for securing superlative results. The charming examples of their art displayed in their premises demonstrate that they are adepts in the judgment of light and shade, and in determining the psychological moment when to snap the shutter of the camera, so as to secure the most pleasing expression of the sitter. They operate in all branches of photography, and are also talented portrait painters in oils. They execute a great deal of commercial photography, including photographs relating to tea and other industries, and their comprehensive collection of pictures of India is very largely drawn upon for reproductions in books and periodicals throughout the world. It may be added that the firm have the honour of appointment to H E the Viceroy and Governor General of India and H E the Governor of Bengal.

The manager is Mr D C Falconer, who has been connected with the business for many years.

FRANCIS and CO, Tailors, Shirt-makers, Hosiers, and Breeches Makers, Grand Hotel Arcade, Chrowninghee

WHENEVER fashion is referred to as an abstract quantity it is always understood as pertaining more especially to feminine apparel, in which the continual changes effected by fancy and caprice sustain a vast amount of the world's industry and commerce. In former centuries man maintained his right to a fuller range of chromatic art and expression in his habiliments than is accorded by the narrow limits of fashion in these less picturesque days, when the effects of the sartorial scheme of the male sex are confined practically to a very few orthodox colours. As an offset against this demarcation the variety of textile production for men's wear is very large, and is excellently demonstrated by the fine assortment in the premises of Messrs Francis and Co, where sartorial art is exemplified in its highest phases, and where are shown materials of the best quality specially adapted for the local climate.

This firm have managed to impart to their establishment all those characteristics of discriminating efficiency and elegance of appointment associated with the leading sartorial houses in the metropolis of the Empire, and it is not surprising that their service and supplies are well taken advantage of by gentlemen able to appreciate the best in everything relating to fabric and workmanship. All the cutting is attended to personally by the principals—Mr W Francis, who was formerly cutter with Messrs Ranken and Co, and Mr L H Houseman, who also has had very long experience in the tailoring trade in India and elsewhere.

The firm, who have been established since 1910, employ a staff of about 43 highly skilled workmen, and all orders are completed on the premises. The telegraphic address is "Breeches," Calcutta.

J. F. MADAN, Wine and General Merchant, 5, Dharamtala Street

THE front portion of the premises of Mr J F Madan at 5, Dharamtala Street is in the form of a very nicely appointed retail store, stocked with such an exhaustive selection of eatables and drinkables that the world's best source of supply of these things may well be stated to be represented there. Next come the offices, and behind these and extending to Moti Lal Street, are the large warehouses filled with the huge assortments of merchandise necessary to meet the demands of this firm's numerous customers. From street to street the distance is about 500 feet.

The business is one of the largest of its kind in India, as may be inferred by the fact that it gives employment to about 1,000 persons. There are branches of it at Kidderpore, Ballygunge, Darjeeling, Lucknow, Delhi, and Bombay. The firm also supply Field Force Canteens at Bannu, Tank, Kohat, Dera Ismail Khan, Dardoni, Idak, Mamajai, Kalabagh, Jandola, Khergi, Kotkai, etc, etc.

The concern was started in 1875 by the gentleman whose name it bears, and who died in 1923. The initial premises were very small, but through Mr Madan's enterprise, development soon resulted, and the premises were enlarged from time to time to meet the continuing expansion.

The firm are agents for the Asiatic Petroleum

Co (India), Ltd, at Darjeeling, Cawnpore, Delhi, Rae Bareilly, Lucknow, Sandila, Shahjahanpur, Bareilly, Chandani, Haldwani, Pilibheet, Lakhimpur, Sitapur, etc, etc, and at Calcutta and Bombay are wholesale and exclusive distributors of Parke, Davis, and Co's high-class pharmaceutical preparations.

Besides his merchandising activities Mr Madan was the pioneer in India in connection with the cinema industry, and left to his heirs and successors the great chain of theatres owned and operated by Madan Theatres, Ltd, comprising no fewer than 91 theatres throughout the principal cities of India and Burma, and including the 14 cinema theatres in Calcutta.

The firm hold warrants of appointment as purveyors to the Rt Hon the Baron Hardinge of Penshurst, the Rt Hon the Baron Chelmsford, former Viceroy and Governor-General of India, and Lord Carmichael of Skirling, late Governor of Bengal.

Messrs J F Madan export large quantities of Tibet wool, Indian condiments, etc, etc. Their telegraphic address is "Jefmadan," Calcutta, and the codes used are the A B C 5th edition and Bentley's.

UBEROI, LTD, Manufacturers of All Kinds of Athletic Goods, 8, Esplanade, East

THE establishment of Messrs Uberoi, Ltd, at 8, Esplanade, East, well sustains the fame of that company as the largest manufacturers of athletic goods in the Orient. It is the principal of the company's branches, and is under the management of Mr K S Bahizada. Its stock, comprising everything that can be suggested in connection with athletic goods, explains the eminent position to which Messrs Uberoi, Ltd, have attained by reason of the high quality of their products, which have won for them a large number of gold and silver medals and awards at Exhibitions throughout the world.

The business was founded in 1888, and carried on under the name of Ganda Singh Uberoi and Co, until the formation in 1912 of the present limited liability company, with the founder, Mr Ganda Singh Uberoi, as managing director. From the commencement the company determined that their name, connected with every type of outdoor and indoor sports, should stand for high-class quality, in which they have certainly well succeeded. Their factories at Sialkot, consisting of fine brick and iron buildings, cover an area of about 5 acres and give employment to about 500 highly skilled workmen. About 70 per cent of the materials required in manufacturing the high-class goods such as seasoned English ash, catgut, leather, glue, English willow, and tennis racket frames, is imported from England, being purchased from absolutely reliable makers through the company's con-

troller of raw materials in London. Other goods purchased annually comprise many thousand cubic feet of mulberry wood from Changa Manga, Para rubber, tons of Sawarak cane for handles of cricket bats and hockey sticks, and a considerable quantity of timber from Kashmir.

All the machinery in the factory is wonderfully varied in character, ranging from the making of iron or brass castings for wickets, or the feet of posts for tennis posts, to the turning of small pieces of wood in fashioning bails for cricket stumps. A tour of the shops reveals a machine for case hardening of cricket bats, having a pressure of 5 tons, a leather skiving machine to ensure an equality of thickness, automatic lathes, rounding machines, a patent interlocking press, a machine for cutting out splices for hockey sticks, patent hockey bends, band, circular and other saw milling machines, and frame-bending machines. Many prominent people have visited the factory, including His Excellency the Governor of the Punjab and His Excellency Field Marshall Sir William R Birdwood, Bart, G C B, G C M G, K C S I, C I E, D S O, who expressed their admiration of its organisation and output.

The large and handsomely appointed stall of Messrs Uberoi, Ltd, at Wembley Exhibition, with its splendid display of their productions, attracted great attention. Amongst the many notabilities who visited it was Her Majesty, Queen Mary, and her appreciation of it was admirably ex-

pressed in the "Sports Traders" of August, 1924

Amongst the various things which Messrs Uberoi, Ltd, have to combat are the spurious imitations of standard materials, one of which is the new "Milky White" Indian gut which is very transparent, and so far as appearance is concerned, looks exactly like highest quality English gut. This new product is made of dried sinews of dead animals and, therefore, does not possess the driving power, tensile strength, and resiliency that are the chief characteristics of high-class English gut manufactured from the fresh intestines (guts) of freshly slaughtered sheep.

As this new "Milky White" Indian gut is extremely inexpensive, and as its appearance is quite as good as super quality English gut, the sports dealers, repair mistris, and tennis markers in India invariably substitute it for high-class English gut, and even some of the cleverest players are unable to detect the fraud until they have actually used the racket. This to a great extent explains the illegitimate competition in the prices of new

tennis rackets and the prices for restringing old rackets which are being supplied by most of the Indian sports dealers posing as actual manufacturers. It will interest tennis players to know that Messrs Uberoi, Ltd, are by far the largest importers of English gut in India, and they use nothing but genuine English gut in stringing all their high-class rackets.

It may be mentioned that the "All-India Military Hockey Team" which went to New Zealand in 1926, insisted on being equipped throughout with the patent buffering hockey sticks of Messrs Uberoi, Ltd, and these were accordingly sold to them by the company, notwithstanding the fact that many small firms were willing to supply the team with hockey sticks free of charge for advertising purposes.

Messrs Uberoi, Ltd, have branches at Lucknow, Madras, Delhi, Rangoon, Agra, Poona, Allahabad, Nagpur, Peshawar, Karachi, Bangalore, Simla, and Rawalpindi. The company's telegraphic address is "Uberoi" for all offices.

THE UNIVERSAL TRADING UNION, Merchants, Engineers and Contractors, Head Office 9, Dalhousie Square East

SINCE 1913 the Universal Trading Union have been doing business in coal, hardware, machinery, and engineering stores. In addition to their head

office at 9, Dalhousie Square and a branch in Caning Street, Calcutta, they have branches at Bombay, Bezwada (Madras), and Hyderabad (Deccan), and their own representatives at all important centres in India and Burma. They are also managing agents of the East India Produce and Coal Co., Ltd.

They specialise as antifriction and mechanical engineers and importers and stockists of materials in that connection. They are sole agents in India for the famous "D W F" ball and roller bearings, which have contributed to the smooth running of a large proportion of the world's machinery and motor vehicles during the last twenty-seven years.

The Universal Trading Union are also sole agents in India for the "Excelsior" and "Loco" brands of hair belting, as well as for the Peng Engineering Works—the well-known manufacturers of high precision steel castings, especially mill gearings and all kinds of power transmission equipments, including shaftings, pulleys, etc. The Electrical and Sundry Import Departments of the Universal Trading Union are in regular touch with European markets, and have a considerable yearly turnover.

The Universal Trading Union are approved contractors to the Government of India and to railways and some feudatory States there. They are also suppliers to a number of jute, cotton, rice, and oil mills and various other factories and establishments throughout India. The telegraphic address of the Universal Trading Union is "Scrompton," and the codes used by them are the A B C, Bentley's, Rudolph Mosse, and private



PREMISES OF THE
UNIVERSAL TRADING UNION, CALCUTTA

PARK HOTEL AND RESTAURANT, 47-49, Park Street

SOME people praise a hotel that others are not enthusiastic about. Hotels are very much like individuals, they vary greatly in character and attraction, and that which appeals to some persons is undesired by others. It all depends upon what is desired. There are hotels where the food is good but the rooms are uncomfortable, and vice versa. There are others where the accommodation is all that can be wanted, but the meals are badly cooked, inadequate, or unpleasantly served. The Park Hotel, excellently situated in one of Calcutta's best and most modern thoroughfares, is a small but select establishment, equipped with all modern conveniences. Each of its bedrooms has its own bathroom, and those who are able to secure accommodation there may well consider themselves fortunate in view of the comfort and convenience provided, at rates that mean much money saved when compared with the expenditure incurred by residence in more pretentious places. Access to the hotel is direct from Park Street by a broad private staircase, so that guests of the

hotel need not pass through the attractive restaurant forming the ground floor of the hotel as an adjunct of it.

The Park Hotel and Restaurant was started in 1923 by Mr E Leder, and its initial character was extremely small compared with the development which it has since attained. Year after year the premises have been improved and adapted to the demands made thereon, and in the beginning of 1927 Mr Leder added to them a Swiss bakery and confectionery, which is proving very successful by reason of the excellence and variety of its production.

The entire business in all its departments is under the personal supervision of Mr Leder, a native of Switzerland, and a professional chef of great experience, not only in Europe, but also at hotels throughout India, including the Grand Hotel, Calcutta, where he was for nearly five years, so that when he started in business for himself he was well equipped for the success he has attained.

**S J MATHEWS, Motor Cycle Specialist,
Showroom and Office 59-1, Park Street Works 58, Free School Street**

THE trend of all modern business activity is towards specialisation, in professional circles as well as in all departments of commerce and industry. The conditions of latter-day competition demand the best in service and supplies, in knowledge and skill. The day of the "jack of all trades and master of none" has passed, and success means knowing how to do a certain thing or things much better than the multitude, who may be wallowing in the sloughs of mediocrity in the same connection.

It is because of his specialisation in motor cycles that Mr S J Mathews has built up the principal business relating thereto in Calcutta. What he does not know about motor cycles, side-cars, and their accessories, may be regarded as negligible. His showroom at 59, Park Street is without duplicate in the country, because of its exceptionally

complete representation of the motor cycle trade. Mr S J Mathews is sole agent in India for the A J S, B S A, Triumph, Harley-Davidson, and Norton motor cycles, and carries a stock of spare parts and accessories for these famous machines that runs into an average value of Rs 70,000. At his works at 58, Free School Street repairs to motor cycles are very skilfully executed by workmen whose constant specialisation in activities connected with the machines mentioned give them a proficiency therein that could not be possible otherwise.

Mr S J Mathews has been established since 1919, and his business, which gives employment to about 50 persons, is the only one of its kind in India. There is a branch of it in The Mall, Lahore.

ANGLO-SWISS WATCH COMPANY, 6 and 7, Dalhousie Square

HUMAN progress is largely a matter of wheels, by which all its affairs may be stated to be determined—the wheels of time, for instance, as manifested by watches. When watches are referred to in connection with the trade of Calcutta reference must follow, as a matter of course, to the Anglo-Swiss Watch Co, through whom a very large proportion of the time-keepers sold in Calcutta are imported and distributed, and who supply many hundreds of European and Indian firms with everything pertaining to their trade. No country in the world is more famous for watches than Switzerland, and anyone interested in the reasons

why the little mountain republic has become so distinguished in that connection will find much tangible demonstration in the large and splendid assortment of time-keepers of every description in the premises of the Anglo-Swiss Watch Co at 6 and 7, Dalhousie Square. The watches displayed there embrace every style that can be suggested, from exquisite little diamond-studded wrist watches for ladies to strong samples of men's watches made to withstand the roughest usage.

The stock comprises also a glittering display of magnificent silver and electro-plated goods and

jewellery well calculated to meet the most uncommon requirements. Besides their importations, the Anglo-Swiss Watch Co., whose home office and factories are at Quartier de l'Industrie, Soleure, Switzerland, are also manufacturers in Calcutta, and give employment there to about 60 persons. In their well-equipped workshop is performed work of every description associated with the trade. The activities there are carried on in a system of specialisation that ensures the highest possible standard of attainment, for practising year after year in certain operations naturally

evolves skill that would otherwise be unobtainable. A watch repairer remains a watch repairer and does nothing else, and the various divisions and sub-divisions in the manufacture of jewellery illustrate the wisdom of the firm's policy very admirably by the economy as well as proficiency with which the entire organisation is operated in all its details.

The business was established in 1909 by Mr E. O. Gammeter, the managing proprietor, under whose able direction it has grown from very small proportions into its present size.

S HATZOPOLLO (PAVLEDI BROS.), General Tobacconists, Grand Hotel Arcade

THE history of the tobacco trade is one of the greatest romances of commerce—a story eloquent through all its pages of the wonderful power of a popular habit spreading universally until at length it has provided investment for vast capital, employment for millions of workers, and a fruitful source of revenue for the Governments of the world.

The tobacconists' trade has its chief representative concern in Calcutta in the business established about 20 years ago under the name of S. Hatzopollo, and owned and operated by Messrs Pavledi Bros. The firm's establishment is admirably situated in the Grand Hotel Arcade, and from it a large number of discriminating smokers in Calcutta obtain their supplies. The stock, being exceedingly comprehensive and including practically all the best-known brands of cigarettes, cigars, pipe tobacco, pipes, and all the details of

the tobacconists' trade, is well calculated to meet the most fastidious or uncommon requirements. While transacting a large retail trade, Messrs Pavledi Bros. are chiefly engaged as wholesale tobacco merchants. They are also noted for their wonderful Nectar Mocha coffee, which, imported from Arabia, is prepared and packed by them in hermetically sealed tins that find their way all over India. The firm had the honour of appointment to H. E. Lord Reading, former Viceroy of India. They have a wholesale depot at Bombay, and are sole agents in India for

Nestor Gianacis, Ltd., Cairo
A. Chelmis & Co., Cairo
Alfred Dunhill, Ltd., London
Marcovitch & Co., Ltd., London
La Flor de Intal, Manila
Pavledi Bros., London
B. Van Der Jack & Co., Eindhoven, Holland

LONGOVICA, LTD (Compagnie Industrielle et Commerciale d'Exportation), Manufacturers of Steel and Metals, Electrical and Mechanical Engineers, 102, Clive Street

THE most outstanding feature of modern commerce and industry is the increasing tendency for important undertakings to become amalgamated with other similar concerns, and form huge combinations which with their vast resources are able to provide service and supplies utterly beyond the capacity of smaller firms. The general reconstruction of Europe after the Great War and the necessity for the maximum output at the lowest possible competitive prices led to many great industrial combines at home and abroad. Calcutta provides an excellent example of such enterprise in the company known as Longovica, Ltd., which was formed in 1922 as the combined agency of nine of the largest industrial concerns in France, viz.

Longwy Steel Works, famous as the first big works taken by the Germans, and now giving employment to 8,000 workers, and producing 460,000 tons of steel per annum.

Gorey Nail and Wire Works
Louvroil and Recquignies
Tube and Presswork Co.

Electro Metallurgy Co. of Dives
North of France Carriage, Wagon and Locomotive Works

Rateau Co.

Renault Works Co.

And General Electric Co. of Nancy

Messrs Longovica, Ltd., therefore, by the vast resources which they represent, are able to supply favourable estimates for all kinds of electrical and general mechanical engineering works and general mill supplies on any scale, and it is not surprising that they are making their influence felt in Calcutta. They are particularly notable for their supplies of steel in every form, but especially for general constructional purposes. They have a branch at Madras, where they also carry large stocks. The managing agent is Mr J. G. Fulton, a long experienced engineer, who, before founding the business in 1922, as already indicated, was for eighteen years with Messrs Burn and Co., Ltd., whose business is reviewed on page 62. The telegraphic address of the company is "Longovica," Calcutta, and the codes used by them are the A B C 5th edition, Bentley's, and private

MITCHELL and CO (CALCUTTA), LTD, Tailors, Outfitters, Dressmakers, and Milliners, 17, Park Street

Nature throughout most of her kingdoms bestows more physical attractions on the male than on the female, but makes one great exception in respect of lovely woman, before whose captivating charms man has ever succumbed without protest or parley. It is not to be wondered at, therefore, that science and art are more applied to the enhancement of the clothing of Nature's most exquisite production than to the habiliments of the male sex, although in former times a fuller expression of individual fancies and tastes was accorded masculine outfitting than in these days of rigid conventionality and narrow demarcation in the canons of chromatic harmony and fashionable decree. Nevertheless, the demonstration afforded by Messrs Mitchell and Co (Calcutta), Ltd, of how men should be dressed for all occasions indicates very pleasantly and eloquently that the art of man's apparelling is of much wider scope and significance than enters into the consciousness of the uninitiated and unreflecting. The entire ensemble of their premises is that of high class specialisation in the materials which are not for the many but the few—people who are particular about style and fit, about colour and texture and the innumerable de-

tails which individually are unnoticed, but collectively are influentially subtle and pleasingly potent in the impressions they make.

The fact that the tailoring departments are on the premises is worthy of note, in view of the insanitary places where clothes are frequently made, especially in the Orient. The cutting is in charge of two European experts, and the firm specialise in ladies' tailoring as well as in the production of men's garments and uniforms of every description. Messrs Mitchell and Co (Calcutta), Ltd, supply the racing colours for all the meetings of the Royal Calcutta Turf Club. The departments for millinery, dressmaking, and ladies' outfitting are exceptionally attractive, and their elegant appointments impart an air of distinction peculiarly their own. The staff includes very clever milliners and dressmakers, whose services are highly appreciated by the firm's numerous lady customers in the city and the Mofussil.

The business was established in 1900, and was taken over in 1914 by the present limited liability company, of which Mr G G H Barbour is Managing Director.

THE RUGBY ENGINEERING WORKS, Automobile, Electrical, and Mechanical Engineers, 182, Lower Circular Road

The Rugby Engineering Works was started by Mr I J D'Cruze, who had been works manager of the old established business carried on in latter years as T R Pratt (Calcutta), Ltd. That business was one of the first automobile undertakings in Calcutta, and had developed very greatly before it went into liquidation. The long years of training and experience which Mr D'Cruze acquired in it well qualified him for success when he launched out on his own account by opening the Rugby Engineering Works. Although not partaking of the extensive character of some of the other similar undertakings in Calcutta, the Rugby Engineering Works, which occupies about an acre of land and gives employment to about 100 persons, is complete in every detail, and its plant and machinery is of greater capacity than might be generally sup-

posed. Everything associated with automobile engineering is included in the highly skilled work therein performed, including the production of brass and aluminium castings, tinsmiths' work, oxy-acetylene welding, gear cutting, vulcanising, armature winding, and everything pertaining to batteries and magnetos. The fact that all the operations are under Mr D'Cruze's personal supervision probably explains the popularity of the establishment for repairs, and it is no exaggeration to say that many a car which arrives in an apparently hopeless condition at the Rugby Engineering Works leaves that establishment as good as it was when new, and sometimes better.

The agency of the Rugby car (American) has recently been taken up by the firm.

JOSEPH and SONS, Manufacturers' Agents and Importers of Motor Accessories, 31, Park Street

The remarkable variety of things associated with the motor trade is excellently demonstrated by the supplies of Messrs Joseph and Sons, who are specialists in that connection both for motor cars and motor cycles. They are sole agents for

Importers of
Lucas Lamps and Horns, Dynamos, Self Starters, Magnetos, Mirrors etc
P and H and Desmo Lamps and Horns, etc
Bowden Central Levers, Cable and Cables, etc
Kismet and Prima Foot Pumps
Ripault's Lifting and Starting Batteries
And Stockists of Willard Lighting and Starting Batteries

The firm's showrooms, excellently situated in Park Street, the chief thoroughfare in Calcutta for the motor trade, contain a large selection of their supplies. The business was established in 1915 by its proprietor, Mr R E Joseph, and has made noteworthy progress. The telegraphic address is "Rejsons," Calcutta and Bentley's code is used.

Rudge Whitworth Motor Cycles
Ariel Motor Cycles
Dunell Motor Cycles
New Hudson Motor Cycles
Terry's Patent Autostra Automatic Air Valves
Terry's Patent Motor Cycle Spring Seat Saddles
Terry's Patent Windshield Cleaners
Runbaken All Metal Track Commutators for Ford Cars Trucks and Tractors

MACDONALD and CO , Milliners, Dressmakers, and Drapers, 30B/2, Chowringhee Road.

DRESSMAKING and millinery have become fine arts necessitating swift understanding of the personality of each client in so far as it relates to the most suitable colour schemes and outlines. The essential qualifications for success therein are a great asset, and Messrs Macdonald and Co pride themselves on their possession. That firm endeavour to exemplify in all their activities as milliners and dressmakers the charming individuality of that which is novel and new, and therefore it is that discerning ladies of Calcutta visit their establishment when they want something out of the common in hats and dresses—something that will express the beautiful in delightful new ways, but conform ever to the prevailing decrees of fashion in London and

Paris, whence much of the firm's stock is obtained. That stock is never superfluous, but wisely regulated so as to reflect the latest ideas in all the dainty details of feminine outfit.

Messrs Macdonald and Co are also general drapers, and keep a comprehensive assortment in that connection. Their staff includes talented milliners and dressmakers equal to the interpretation of the most fastidious orders, and the fact that the firm were honoured with appointment to H E the Countess of Reading is an eloquent indication of how well they operate in everything pertaining to ladies' outfitting. The business has been established since 1910, and there is a branch of it at Darjeeling.

D MILLAR and CO , Tailors and General Outfitters, Grand Hotel Arcade

THE activities sustaining the business carried on by Messrs D Millar and Co are meant to convey very much more than can be expressed in stereotyped phraseology. Everything has its expression, elaborate or plain, readily understood or difficult of perception. The garments produced by Messrs D Millar and Co are intended to express delight of the superlative in sartorial art as well as in practical utility. They are turned out with conscious pride of their merit, for the individual able to differentiate between superiority and inferiority, and who is at all fastidious about the little details beyond the consciousness of the unobservant and the uninitiated. It is the fastidious dresser who can

best appreciate the fabrics and workmanship associated with Messrs D Millar and Co, the man of discernment and consequence, whose personality radiates knowledge and efficiency. So it is ever in a matter of clothes—clothes that fit perfectly because perfectly made and of perfect materials.

The firm's establishment is handsomely appointed internally and externally, and has been considerably enlarged and improved since they started their business in 1924. The owners are Messrs D Millar and W Kemp, who personally supervise all its details, and the very important matter of cutting is in the able and long experienced hands of Mr Kemp.

ARRATOON and CO , General Merchants and Agents, Stephen House, 5, Dalhousie Square

WHILE operating as general merchants and agents Messrs Arratoon and Co specialise in the manufacture of shellac, and are one of the leading firms in that connection in Calcutta.

There are many qualities of shellac, but the standard article of commerce, as produced by Messrs Arratoon and Co, is known as "T N," and "Superfine," the quality depending on the kind of sticklac from which it is made. The principal manufactures in which shellac is used

are varnishes, hats, electrical appliances, and gramophone records as well as other goods in a less degree.

The business of Messrs Arratoon and Co was established in 1905 by the late Mr A G Arratoon, and is now carried on by his son, Mr G A Arratoon. The firm's telegraphic address is "Avietick," and their codes are the A B C 5th and 6th editions and Bentley's.

P SWARIES and CO , Funeral Furnishers and Monumental Sculptors, 9, Mangoe Lane

TACT and good taste are a *sine qua non* in the business of the undertaker, who cannot advertise his service and supplies with the same facility and freedom as the exponents of other trades, for contemplation of the details associated with the departure from the material plane is not calculated to enhance the joy of everyday life. One of the principal firms of undertakers in Calcutta is that of Messrs P Swaries and Co, who give employment to about seventy persons, and whose services have been in constant requisition since they commenced business in 1851. Those who visit them in order to make the last sad arrangements in connection with the departed will find the firm worthy of every encomium because of their sympathetic understanding and facility of adaptation to every

requirement and financial consideration. Not only do they make coffins to order, but they also keep a stock of imported varieties of a rich and elaborate character, together with all the accessories pertaining thereto. They have motor as well as horse hearses, and the completeness of their business is further manifested by their skilful activities as monumental masons and marble workers. They import their marble from Carrara, Italy, the world's chief source of supply of that material, and their variety of designs of grave-stones, monuments, etc., is well calculated to meet the most diverse requirements. The firm have a branch at King's Road, Howrah. The manager of the business is Mr A M La Valette.

BRITISH TYPEWRITER CO , 5, Old Court House Street

THE British Typewriter Co well sustain the advice given by His Majesty the King for the support of British made goods, for they are the sole agents in Calcutta for the British Empire typewriter, a really high-grade British standard typewriter, made with British brains, British labour, and British capital. This excellent machine is the outcome of more than thirty years' typewriter experience. Manufactured in a specially built factory at West Bromwich, Staffordshire, equipped with the most up-to-date plant, it embodies all the best features of the modern writing machine. Silent, speedy, yet beautifully light in action, it is not surprising that it has been adopted for use in all Government departments.

The British Typewriter Co are specialists in the supply of everything that tends to reduce the routine of office work and to enhance its accuracy, and their greatly varied stock comprises all manner of ingenious contrivances for the purposes mentioned, also stationery and general sundries, etc. The department for general repairs of typewriters is also a noteworthy feature of the firm's activities.

The business, which gives employment to about thirty people, was established in 1911 by Mr P C Banerjee and Mr John Chaplin. The latter retired in 1926, so that the sole proprietor now is Mr P C Banerjee. The firm's telegraphic address is "Duplicator," Calcutta.

COOPER and CO , Chemists, Druggists, and Manufacturers of Aerated Waters, 26, Waterloo Street

THE fact that Messrs Cooper and Co have been honoured by various appointments to Viceroys of India and Governors of Bengal is an eloquent indication of their status as chemists and druggists and manufacturers of aerated waters. Activities such as theirs demand, in a city like Calcutta, very great care for the superlative in service and supplies. Drugs, chemicals, and pharmaceutical goods in general, unless carefully regulated, are very apt to deteriorate in the local tropical heat. Messrs Cooper and Co obviate this by very watchful attention in regard to their importations, which they determine according to the necessities of their trade, that is to say, never getting more at a time than is necessary for their immediate requirements, thus ensuring the absolute freshness and purity which would otherwise not be so certain. They adopt the wise policy of keeping their

goods continually on the turnover week by week. In their dispensing department are employed qualified experts, so that every confidence may be placed on the accuracy of the prescriptions compounded by them.

In no production is purity more essential and desirable than in that of aerated waters, and for this Messrs Cooper and Co enjoy a well-earned reputation. They are suppliers in that connection to Government House and many institutions in Calcutta.

The business was established in 1902 by Mr D R Kotwal, and carried on by him until his death on September 26th, 1924. He was succeeded in its control by his son, Mr R D Kotwal, who has been connected with it throughout his career.

The firm have a branch at 77, Wellesley Street. The telegraphic address is "Kotwal," Calcutta.

S K CHAKRAVARTI, Sanitary Engineer and Plumber, Mission Row

IN no branch of activity are executive skill and honesty in material more necessary and important than in sanitary engineering and plumbing. Faulty construction and imperfect supplies have added many a chapter to the history of calamitous happenings, and if King Edward, when Prince of Wales, could contract typhoid fever through a defective drain pipe in Buckingham Palace, notwithstanding the great care exercised over that royal home, how much more likely might a similar outbreak occur in buildings where less attention is paid to sanitation, especially in a climate like that of Calcutta. The city is, however, well served in connection with all matters pertaining to modern sanitary engineering and plumbing by Mr S K Chakravarti, B E , A M I E (Ind), M I P (Lon), who, since he started business in 1919, has executed a large amount of important work relating to buildings of every description, including contracts for the Military Works, Government of India, the Calcutta Corporation, East Indian Rail-

way, Bengal P W D , Bihar and Orissa Government, Tata Iron and Steel Works, B K Paul and Co , Peliti's Restaurant, Andrew Yule and Co , and numerous hospitals, convents, etc.

Mr Chakravarti's service and supplies embrace all the modern productions for the perfection of hot and cold water systems, and the elaboration of sanitation into an art as unlimited as it is important. The comprehensive stock of fittings in his showrooms in Mission Row is an object lesson in what are now provided for comfort and convenience in everything associated with sanitation and general plumbing, and affords a striking contrast to the comparatively crude and imperfect ways and means which obtained not so very long ago in the same connection.

Mr Chakravarti gives employment to about 200 persons, and his works and warehouses are in Creek Lane. His telegraphic address is "Laboratory" and the codes used by him are the A B C and Bentley's.

**DAVIDSON and CO , Importers of Groceries, Provisions, Wines and Spirits, etc ,
4 and 5, Lindsay Street**

THE front of Messrs Davidson and Co's premises at 4 and 5, Lindsay Street, is brightly and handsomely appointed, and the windows are arranged with a tasteful display of some of the innumerable commodities in which the firm deal. The interior of the store is also nicely arranged, and its large assortments of things eatable and drinkable bear labels and trade-marks of the most renowned manufacturers of such things in the world. Whatever is worth stocking for the commissariat of the home where high-quality food products are a necessity is almost sure to be found in the great variety supplied by Messrs Davidson and Co, who are one of the leading firms in their line of trade in Calcutta. The ordinary visitor to their establishment knows only the attractive retail store, and is unacquainted with the extensive regions behind, where are held stocks that testify eloquently to the volume of trade transacted by the

firm, everything being arranged in a system that is the result of careful study and experience of the best methods of operation for the enhancement of the condition of the goods, and the saving of time and labour in the daily routine.

The firm have been established since 1920, and have other premises at 13, Bentinck Street. They are noteworthy for their family trade, and have the honour of appointment as suppliers of wines and spirits to H E the Governor of Bengal. Amongst their proprietary specialties are their syrups made from pure sugar and fruit juice, their mango chutney and Indian condiments, lard, and vinegar, etc.

Messrs Davidson and Co are agents for many well-known concerns, including John Robertson and Son, Dundee, Booth's Distillery, Ltd, London, Quarles Harris and Co's Oporto wine, Forrester and Co's sherries, Jaraza la Frontiro, Spain, etc, etc.

K C BOSE and CO , Shambazar Biscuit and Barley Factory, 2, Kalachand Sanyal Lane

BISCUITS and barley! What an attractive combination, pleasing to the eyes and more pleasing to the palate, so suggestive of goodness and health, as all simple food is, nothing there for contention of creed or crank amongst all the diversities of India's teeming millions, biscuits, the oldest form of human sustenance—the unleavened cakes of the Hebrews, and barley, the grain that fed great empires of long ago. No wonder the products of the Shambazar Steam Biscuit and Barley Factory are highly appreciated throughout India, the wonderful land of ancient philosophies, temples, holy men, and toiling masses. That factory's delicious "Gem" biscuits are popularly known as the holy biscuits because of their obvious purity. In their manufacture, and also in that of the many other varieties of the firm's biscuits, there is no contact with human hands. The dough is mixed by machinery, pounded out into long thin strips by machinery, perforated by dies into their ultimate forms, and passed on an endless revolving web through the wonderful steam ovens, whence, on emergence, they are packed in hermetically sealed tins and despatched to gladden

highly appreciating consumers throughout Hindustan.

The firm's famous barley powder is also prepared by machinery under commendable hygienic conditions. Indeed, the outstanding feature of the Shambadar Steam Biscuit and Barley Factory is its cleanliness, which is particularly commendable in view of the unsavoury and insanitary conditions under which many food stuffs are produced in India. The factory, which has recently been entirely remodelled and enlarged, is complete in every detail. The boxes into which the products are packed so nicely are made on the premises. Nothing is lacking there that can contribute to the perfection of the output and the excellent reputation which Messrs K C Bose and Co have won in connection therewith.

The business, which gives employment to about 150 persons, was started in 1885 by Mr K C Bose, who died in 1926, and is now carried on by his four sons, Mr T P, Mr S P, Mr B P, and Mr B P Bose. It is the largest indigenous undertaking of its kind in India, and the only one devoted to the production of barley products.

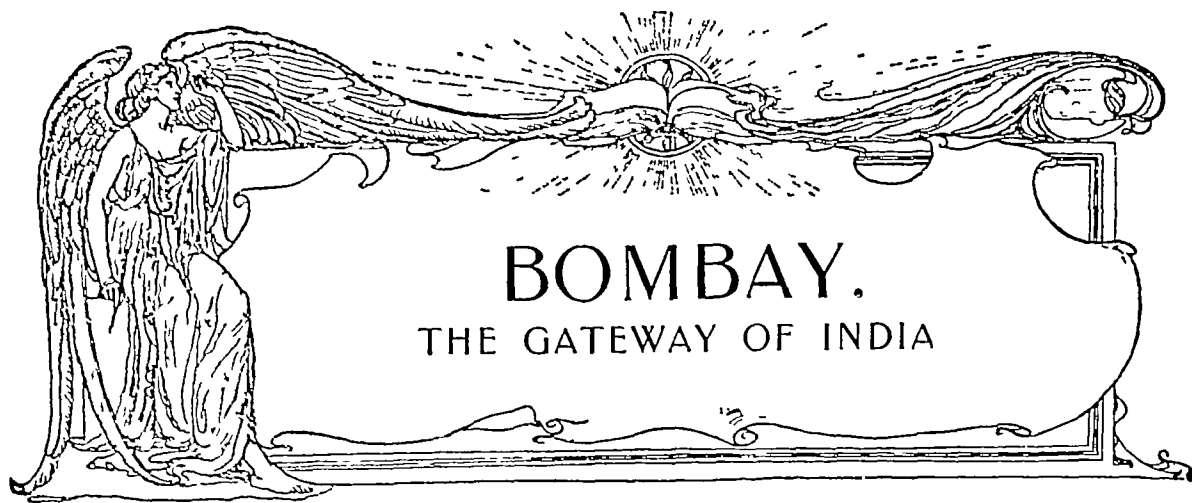
**THE ITALIAN STORES, Importers of Wines and Spirits, Groceries, and Provisions,
9-2, Chowringhee Road**

CHOWRINGHEE ROAD is one of the finest of Calcutta's thoroughfares. On one side of it is the great expanse of the Maidan, and on the other a long line of shops of every description. Amongst the latter is the establishment carried on under the name of The Italian Stores, where may be obtained, as might be inferred from its title, all kinds of groceries and provisions, wines and spirits, imported direct from the manufacturers overseas.

The firm transact a wholesale as well as retail trade, and are agents for Archibald Lauder and

Co's "Royal Northern Cream" whisky, of guaranteed age and quality, which has been awarded various gold medals. They are also agents for the Danish "Tuborg" beer and the German "Dortmunder" lager beer.

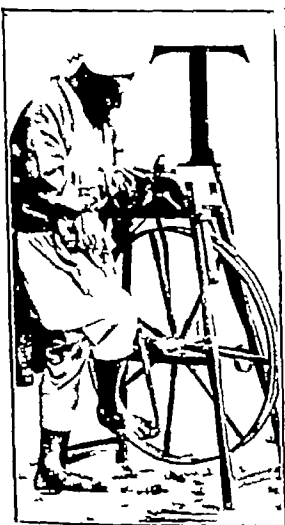
The business was started in 1910 by Italian, and taken over in 1912 by Mr K L Mullick, one of the best-known Hindu commercial men in Calcutta. It is now operated by his sons, Messrs N L and P C Mullick, who are the proprietors.



BOMBAY.

THE GATEWAY OF INDIA

The Approach



THE beauty of Bombay harbour, with its charming islands, secluded creeks, and grand background of hills, has been well described by many famous writers "With very peculiar emotions did I ascend the deck," says Norman Macleod, "to look for the first time on that great country, associated with so much to stir the imagination of every British subject, and most of all of every Christian minister. The scene which meets the eye when entering the harbour is most striking and

lovely. Every other thought is for the moment lost in a sense of its beauty. The forests of palm-trees which, in the hot and motionless air, repose on the lower hills, along the margin of the shore, at once attract attention as being thoroughly characteristic of Eastern climes. The islands as they unfold themselves, with their masses of verdure, and the bays, and vanishings of the sea into distant river-like reaches, lost in a soft bright haze, above which singular hills (rounded, obelisk-terraced) lift themselves, all combine to form a complete picture, framed by the gleaming blue sea below, and by the cloudless sea above, full of intense heat and light of burnished brightness. Looking nearer, one notices the ships from every clime, and of every size and kind, fixed in a sunny mist on a molten sea—ships at anchor—ships crowding their masts near the wharves, and boats without number, with their large matting sails and covered poop, dipping their oars in silver light, all going on their several errands, and a goodly number making for our steamer. Beyond the ships and masts, white houses among trees, and here and there a steeple, indicating the long land line of the Colaba Point, tells us where the famous city of Bombay lies, with its worshippers of fire and of fine gold."

Prince Karagecorgewitch, who followed thirty years later, has left the following vivid description of the approach to the city

"The air is heavy with indefinable perfume. We are already coasting the Indian shore, but it remains invisible, and gives no sign but by these gusts of warmer air laden with that inscrutable aroma of musk and pepper. A lighthouse to port, which we have for some time taken for a star, vanishes in the light mist that hangs over the coast and then again there is nothing but the immensity of waters under the clear night, blue with moonlight.

All the day long a quantity of medusae have surrounded the ship, white, as large as an ostrich's egg, with a pink or lilac heart like a flower, others of enormous size, of a paler blue than the sea, fringed with intense and luminous green—a splash of light on the dusk of the deep. Others, again, white, blossoming with every shade of rose and violet. Then, towards evening, myriads of very small ones, thickening the water, give it a yellowish tinge, clinging to the ship's side, rolling in the furrow of its wake, a compact swarm, for hours constantly renewed, but they have at last disappeared, leaving the sea clear, transparent, twinkling with large flecks of phosphorescence that rise slowly from the depths, flash on the surface and die out at once under the light of the sky.

Before daybreak, in the doubtful light of waning night, dim masses are visible—grey and purple mountains—mountains shaped like temples, of which two indeed seem to be crowned with low squat towers as if unfinished. The morning mist shrouds everything, the scene insensibly passes through a series of pale tints, to reappear ere long in the clear rose light, which sheds a powdering of glowing gold on the broad roadstead of Bombay.

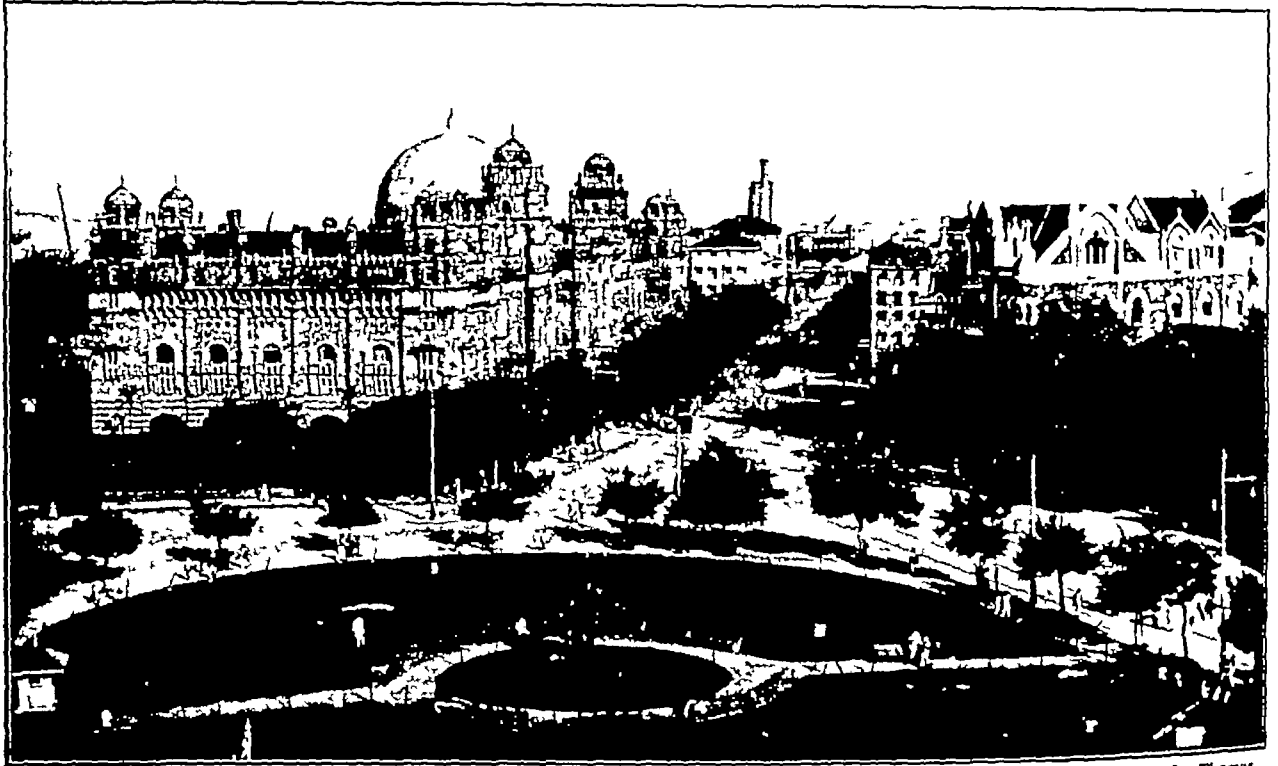
But the enchantment of this rose-tinted land, vibrating in the sunshine, is evanescent. The city comes into view in huge white masses—docks and factories with tall chimneys, and coco-palms, in long lines of monotonous growth, overshadow square houses devoid of style. As we go nearer, Gothic towers are distinguishable among the

buildings—faint reminiscences of Chester, clumsily revived under the burning light of white Asia

In the spacious harbour, where a whole fleet of steamships lies at anchor, a swarm of decked boats are moving about, sober in colour, with the bows raised very high in a long peak, and immense narrow sails crossed like a pair of scissors, and resembling a seagull's wings "

The first object which greets the voyager approaching Bombay by sea is the Prong Lighthouse, standing on the Colaba promontory. The lighthouse is of a circular form, and has within it a flight of steps lead-

every variety of landscape scenery, the harbour of Bombay is indeed unsurpassed by any other harbour in the world. "The harbour scenery of Bombay," wrote Mrs Postans, "is justly considered the most lovely in the world. The deep smooth waters, the bright blue cloudless sky, the clustering islands, fringed with the dark feathers of the palm-trees, which seem so jealously to conceal the line where the fair elements unite, the pale purple Ghats, towering higher and higher, in piles of varied form, their lofty summits dim in the misty distance, form a picture which fascinates the eye and spell-binds the imagination as com-



(Photo D N Thomas)

PUBLIC GARDENS AND GENERAL POST OFFICE (left)
AT THE TOP OF HORNBY ROAD, BOMBAY

ing to the top. South of it stands the Prong's Lighthouse, composed entirely of glass and having eight sides, the whole revolving once in eighty seconds so as to show a bright flash every ten seconds. Passing this lighthouse the steamer enters the commodious harbour, where it casts anchor opposite the eastern front of "the Fort," corresponding to "the City" in London. From the anchorage the magnificent view of the "Queen of Asiatic Cities" is dominated by the Taj Mahal Hotel, one of the most imposing modern buildings in India. In the opposite direction the cliffs of Bawa Malang stand out from the "terraced trap peaks" of the Western Ghats. To the north-east lies Butcher's Island and Elephanta, while close at hand are the fortified islands in the beautiful harbour, the scenery of which has bewitched many a voyager. Beautiful in its setting, studded with islets sparkling like emeralds on the bosom of the sea and comprising

pletely as it baffles the power of language to portray "

Configuration of the Island

"There rolls the deep where grew the tree,
O earth! what changes hast thou seen!"

In and around Bombay, the finest port and gateway of India, and the capital of the Bombay Presidency, can be pointed out sites where once there were forests resounding with the roar of wild beasts, but where now rolls the sea with the music of the waves. Trees grow, too, on many a strip of land once submerged in water, but hurled upwards by Nature, or snatched from Neptune by the genius of man. Historians say that in prehistoric days the western shore of India was subjected to a series of volcanic shocks. The earliest disturbance severed Bombay from the mainland of India, and the latest raised above high water mark scattered portions forming a cluster of seven

isles which lay desolate on the sea for countless unarticulate centuries

Modern research confirms the theory that these islets, named Heptanesia, by Ptolemy, were formed as the result of the breaches caused by volcanic disturbance in a pair of rocky ridges which lie roughly parallel to each other, north-east and south-west, and separated in the south by the reef-guarded waters of Back Bay. At high tide the ocean must have swept through the fissures in these ridges with "all the fury and pleasure of an Arabian colt," and covered with water a considerable tract of low-lying ground between the islands

thence continuously with the mainland by means of two causeways, one at Sion, on the east, and the other at Mahim, on the west, and two railway embankments. It consists of a low-lying plain about a mile and a half long by three to four miles broad, flanked by two parallel ridges of low hills. Point Colaba, the headland formed by one of the ridges, protects the harbour lying on its eastern side, and measuring six miles in breadth, from the force of the open sea. The other ridge terminates in Malabar Hill, and between the two lies the shallow expanse of the beautiful Back Bay, which, extending in a picturesque palm-fringed



PUBLIC GARDENS, VICINITY OF VICTORIA RAILWAY STATION, BOMBAY. [Photo Times of India]

The outward appearance of this cluster was more or less the same until the beginning of the nineteenth century. Southernmost of all lay the narrow stretch of rocky land known as Upper Colaba. In close proximity towards the north was a small triangular islet called Al-Omani's, or Deep-sea Fisherman's Island, which, during later years, came to be metamorphosed into "Old Woman's Island." On the west was stretched a high hill covered with jungle and running down in a point into the sea, while the eastern portion was composed of low-lying ground covered with tamarinds and other shrubs, and overlooked by a rocky ridge known as Dongri, or the Hill-tract. Northward, beyond a narrow creek, lay another irregular island, part hill, part dale. Three other distinct islets composed the northern portion of what is now known as the Island of Bombay.

The island is situated in latitude $18^{\circ} 54' N$, longitude $72^{\circ} 49' E$, and covers an area of about 25 square miles. At its northern extremity it is united with the larger island of Salsette, and

crescent, vies in its exquisite beauty with Naples. In shape the island is a trapezoid, and has been likened to a hand laid palm upwards, with the fingers stretching southwards into the sea and the thumb representing Malabar Hill, with Back Bay between the thumb and the forefinger.

Early History

The seven islands comprised by Bombay formed an outlying portion of the kingdom called "Aparantak," or "Aparanta," by Sanskrit writers of the Puranic period, and "Ariaka" by Ptolemy. The territory is identified by the early historians and antiquaries with the North Konkan ruled by the dynasty of Manryas, founded by the famous Chandragupta of Pataliputra. The rock inscriptions found at Girnar, in Kathiawar, and other places show that the earliest ruler was the great king Asoka of this dynasty, who reigned between B.C. 263 and 229. According to these inscriptions Asoka in the middle of the third century B.C., sent Buddhist priests to Rastikas, Pethani-

kas, and Aparantas. A Ceylonese chronicle, called the *Mahavanso*, also records the fact that the Buddhist high priest, Moggolputto, despatched preachers of Buddhism in accordance with the king's orders to Maharatta, Aparanta, and Banavasi. The discovery at Sapora, then the capital city of the kingdom, of a fragment of



BALLARD ROAD, BOMBAY
(Looking from Pier Entrance)

the eighth Edict affords a further proof of the sway held by Asoka over the province of Aparantaka and its outlying islands.

It seems that even during those early days the fame of the markets of these cities had spread abroad among other nations. The Phoenician and the Babylonian traders reached the coast from the sea, while the Aryan invaders penetrated it from the land side, imposing their language and religion on the inhabitants. For years the vessels of the Arab and the Persian, the Greek and the Christian, sailed between the famous ports of



[Photo D N Thomas]

GRAHAM ROAD,
BALLARD ESTATE, BOMBAY

the world and the Konkan, raising Chaul in the south to the position of a wealthy capital. In describing the opulence and glory of the king who ruled over this district, Megasthenes mentions his elephants, cavalry, and infantry, and refers to Bombay harbour as a place where five rivers flow into the sea, from which it would appear that the importance of this harbour came to be recognised with the early development of foreign trade.

But beyond this rather vague indication of the potentialities of a harbour that was destined to be the gateway of the East, no evidence is found of any connection between these islands and the kingdom of the mainland in the pages of history of the rise and fall of the ancient Hindu monarchies. Merchants and sea-rovers came and passed away towards the rich cities of the mainland, leaving the aboriginal Koli undisturbed in his hut settlements, free to cast his nets into the encircling waters of the sea, and to offer his homage to the Mother-Goddess, Mumbadevi, at her shrine situated somewhere about the spot where the Victoria Terminus now stands.

Passing across the gloom of several centuries, we at last arrive at the Silhara epoch, an epoch of considerable importance, during which the Island of Bombay must have been brought into closer contact with the more advanced cities of the Konkan. One of the chief cities of the Silhara kings who ruled in the North Konkan from the year 810 to 1260, was Puri, or Elephanta



CHURCHGATE STREET, BOMBAY

Island, the capital, situated in close proximity to the seven islands. The Silharas fostered trade, encouraged colonisation, and introduced in these islands settlers from all directions—Hindu, Mahomedan, Persian, Zoroastrian, Arab, Jew, and Christian. For the purposes of land revenue the territory was divided into districts called "Rashtras," which were again sub-divided into "Vishayas" and "Gramas" (villages). A "Rajapath," or king's highway, was constructed passing a little north of Bhandup and following the same line as the existing road from Bombay to Thana. Many a visitor from foreign lands who flocked to the territory of the Silharas either by this highway or by the sea must have created some impression on the simple life of the inhabitants of Bombay.

The monarchs themselves seem to have attached some importance to the island. At the extreme edge of Malabar Point there was a strangely-shaped rock, "a fancied yoni, of no easy access in the stormy season, incessantly surf-buffed." This gave to the spot the name "Shri-Gundi," or luck's

stone, and built there a mighty temple in which were carved the images of the Trimurti. Years later the Brahmin priests invented a tale describing the origin of the temple to which they were attached. According to their story, Rama halted at the spot in question on his journey to Lanka, and made himself a "linga" of the sand of the shore, wherefore the deity is called "Valaka Ishvara," the "Sand Lord", and the locality is called Valkeshwar.

With the overthrow of the Silhara dynasty, the Northern Konkan was annexed to the kingdom of Devagiri. This kingdom was invaded by Allaud-din Khilji, of Delhi, in the year 1294. Victory attended the arms of the followers of Islam, and had far-reaching influence on the destinies of Bombay. After the defeat of Ramdev, of Devagiri, his second son, Bhima Raja, established himself as ruler of the North Konkan, which had up to that date been free from the Moslem attack, and with his advent commences the history of the growth of Bombay.



[Photo D N Thomas]

DONGRI ROAD, BOMBAY

Bhimdev settled in Mahim, known before his arrival as "Newale," or Baradhet (the desert island), sparsely peopled by Koli fishermen, and other low castes, covered with babul and coconut-trees, and sanctified by a temple of Valuk Ishwar and a shrine of the ancient goddess Mumbadevi. Here soon sprang up a fair city of temples and palaces boasting a court of justice. Previously Bombay was a mere appendage of Puri, Bhimdev raised her to the position of a capital named, by Bhimdev, Mahi-Kavati, or Mahim. Till the close of the Hindu period, and for many years later, Mahim was the most important of all the islands of the Heptanesia, and formed the headquarters of a Government which held sway over the islands now welded together under the name of Bombay.

After the fall of the Devagiri dynasty in 1318 commenced the Mahomedan supremacy. Mubarak Shah I extended his outposts to the sea and occupied Mahim in Bombay. From the days of the second Khalifah Umar the Arab soldiers and seamen had visited the shores of western India, and many a trader following in their wake had settled

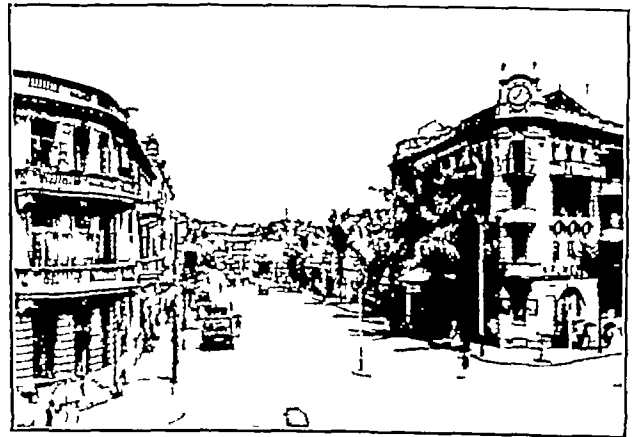
down in Gujerat. Allowed to exercise their religion without hindrance, those early settlers had spread along the coast line and intermarried with the Hindu population, so that by this time there was a large Mahomedan population in the coast towns to support Mubarak in the establishment of his garrisons in the seven islands.



[Photo D N Thomas]

QUEEN'S ROAD, BOMBAY.

In remarkable contrast to the religious toleration of the Hindus, the regime of the Mahomedans was marked by a fanatical persecution of the Hindu. For years they waged war on the religion of the *Kafirs*, destroying temples and contributing nothing towards the development of Bombay. A fishing village it was when it fell into their hands, and such it remained until the close of the fifteenth century, when an event of world-wide importance took place which was destined to bring



[Photo D N Thomas]

LEAMINGTON ROAD, BOMBAY

about revolutionary changes in its history. That epoch-making occurrence was the famous voyage of Vasco de Gama, who, abandoning the western route which Columbus found blocked up by a continent, doubled the Cape of Good Hope and sailed up to the coast of India, landing at Calicut. With this discovery came a wave of invasion from Portugal. No resistance was offered to settlement on the west coast at that time, but the Arab traders

SEAPORTS OF INDIA AND CEYLON.

were positively hostile to the foreigners, whom they called *Firangi*

The Sultan of Cairo despatched an Egyptian fleet to expel the Portuguese from India. The Portuguese made a counter-attack, sailing up to Dabhol with a fleet of fifteen vessels and storming the city. Coming down the coast again, they captured a vessel in Bandra Creek, but finding the plunder insufficient for their needs, they landed at Mahim. This is the first record of Europeans setting foot on the island. But it was merely a combined cattle raid and slave-hunt which enabled the fleet to proceed to Diu. In course of time these settlers from the west felt the necessity for fortified positions along the coast. They approached the Sultan at Ahmedabad, who was willing to make

naval battle, "The Island of Good Life," they made Bassein their capital, where they built numerous churches, and reproduced the gaieties and brilliance of Lisbon.

The Advent of the British.

The first Englishman to come to India was a Jesuit priest, Thomas Stephens, a great linguist. He lived in Goa, about 1759, as Rector of the College of Margao. Thence he wrote letters to his father, who was a London merchant, which kindled a desire in the hearts of his countrymen to capture a portion of the East Indian trade. In 1583 four Englishmen travelled to the west coast of India via the Persian Gulf. The Portuguese arrested them as interlopers and pirates and imprisoned



[Photo 'Times of India']

FLORAL FOUNTAIN AND HORNBY ROAD, BOMBAY.

over Bombay to them, but as they had set their heart on Diu, this offer was rejected. Soon afterwards, however, they bombarded Mahim, and handed over the port to the ruler of Chaul. A great naval battle was also fought by the gallant captain, Heitor de Silveira, with the Mahomedans, in the Dharamta Creek. This and other incursions from the sea compelled the Sultan Bahadur to enter into a treaty with the *Firangis*, whereby he gave and bequeathed to the King of Portugal "the city of Bassein, its territories, islands and seas, with all its revenues, in the same way as he, the Sultan Bahadur, King of Gujarat, had held them before, provided all vessels from the Kingdom of Gujarat bound for the Red Sea should first call at Bassein for passes, and on return voyage call there again in order to pay duties under penalty and risk of seizure." As Bombay formed part of the appurtenances of Bassein, it thus passed out of the hands of the followers of the Prophet to those of the devotees of the Virgin. But although they settled there and named it, in the days of the

them Thomas Stephens intervened in their behalf, and they were soon released. One of them then returned to England, another took service under the Moghul Emperor as a jeweller, the third settled down in Goa as a shopkeeper, the fourth, who was an artist, obtained his liberty by becoming a Roman Catholic, but subsequently left the Jesuits and married a half-caste woman. The exploits of these merchant adventurers may, however, be said to have paved the way for the formation of the East India Company.

The factors of the Company, stationed at Surat appear to have realised the value of the seven islands as a naval base, otherwise they would not have fought the Battle of Swally. In 1614 the Portuguese Viceroy sailed for Goa with seven galleons and several other vessels containing 14,000 Portuguese and a large amount of artillery. He wished to destroy four English vessels then at Swally, under the command of Nicholas Down. On December 23rd the Portuguese fleet cast anchor between the English and Surat, but they were

driven off with heavy losses. In 1652 the Surat Council impressed upon the authorities in England the desirability of purchasing Bombay from the Portuguese. The directors brought the proposal to the notice of Cromwell and pointed out to him the excellence of Bombay harbour and its natural isolation from attacks by land. Thus was the diplomatic machinery set at work which led to the signing at the palace of Whitehall, London, on June 23rd, 1661, the marriage-treaty between Charles II and Infanta Catharina of Portugal, whereby the port and island of Bombay were handed over to the King of Great Britain, his heirs and successors, for ever. To take delivery of the island the Earl of Marlborough was despatched from England in March, 1662, with five

India will be lost on the same day in which the English nation is settled in Bombay."

The seven islands then contained only ten thousand people all told. Between these islands covered with coconut, targola, tamarind, and other plantations, the waters of the sea rushed in turbulent torrents, so that at spring-tide Kamatipura, Byculla, and Dadar formed an inland sea. The principal town was Mahim. On Dongri Hill, adjoining the harbour, there were a few fishermen's huts or tents, and a few houses were seen interspersed amongst palm-trees where the fort stood later.

All this is now changed completely. Indeed, with the advent of the English not only the appearance but the fate of Bombay was entirely altered.



[Photo (D N Thomas

PAREL ROAD, BOMBAY.

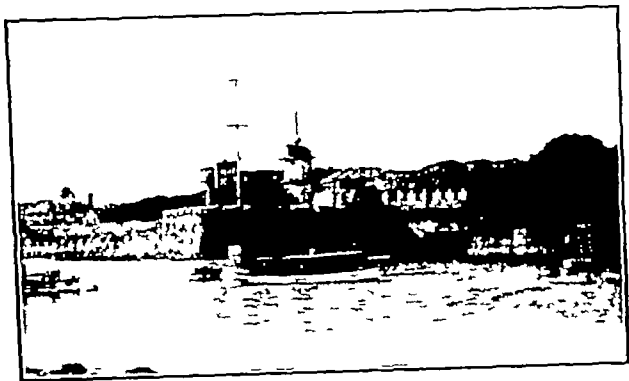
ships and five hundred soldiers under Sir Abraham Shipman. They were accompanied by Antonio de Mello de Castro, Viceroy of the King of Portugal. The fleet arrived at Bombay in September, 1662, and the Earl at once sent a formal demand to the Portuguese Viceroy to make over the Dower Royal, worthless though it appeared to be, to the representatives of the English Crown. But the Portuguese Viceroy and Portuguese subjects in India, finding it a heart-rending duty, pursued a policy of procrastination. In striking contrast to the ignorance of the worth of the island which prevailed in Europe, the Viceroy appears to have fully appreciated the importance of the "contemptible little patch of mud-flat and fishing village." "I confess at the feet of Your Majesty," he observed in despair when compelled to give over possession of the place, "that only the obedience I owe Your Majesty as a vassal could have forced me to this deed because I foresee the great trouble that from this neighbourhood will result to the Portuguese

Connected causeways and breakwaters have converted the island into a promontory of solid land covering an area of 25 square miles, united at its northern extremity with the larger island of Salsette and thence continuously with the mainland by means of two causeways and railway embankments. The population has increased more than a hundredfold, numbering more than a million and a quarter, and Bombay has become the western gate and cosmopolitan metropolis of India.

Under the British Flag

The keynote of the policy of the first Governor of Bombay, Humphrey Cooke, whom the Portuguese Viceroy knew in Lisbon as a grocer, was territorial expansion. His definition of an island was a piece of land entirely surrounded by water at low tide as well as high. Wherever he could walk across dry shod at any time, he claimed continuity for the Island of Bombay, and seized the villages contiguous to the island proper, namely, Mahim, Sion,

Dharavi, and Vadala But such acquisitiveness was not confined to the service of the Crown It was extended to the service of the self as well, with the result that he was incarcerated on a charge of extortion and mismanagement by Sir Gervas Lucas, who had been deputed to turn him out On the death of Sir Gervas on May 21st, 1667, the reins of Government were handed over to Captain Henry Gary, the Deputy Governor Thereupon Cooke, who had escaped from prison, and was



OLD FORTIFICATIONS, BOMBAY.

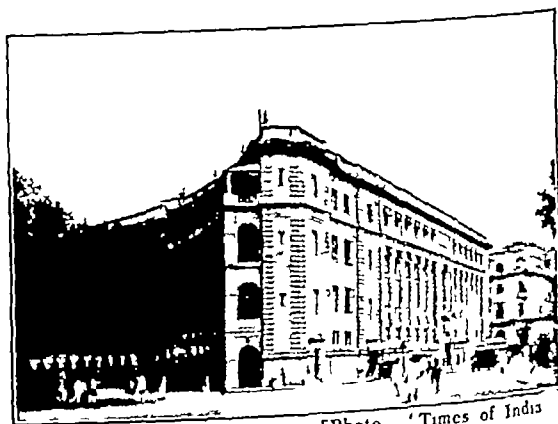
living at Goa under the protection of the Jesuits, sent in a claim to succeed to the governorship, voyaged up to Bandra, whence, with Jesuit help, he endeavoured to attack Bombay The Bombay Council, however, repelled the attack, and Cooke returned to Bassein, where he died soon afterwards in a monastery belonging to the Order of Jesus

In the following year the island was transferred from the Crown to the East India Company "to be held in free and common soccage, as the Manor of East Greenwich, at a farm-rent of £10 payable on September 30 in each year" Gary delivered over its charge to Sir George Oxenden, the Surat President, who died in July, 1669, and was succeeded by that "chivalric, intrepid, man," that "Puritan Imperialist," Gerald Aungier, whose progressive policy was characterised by an earnest desire to promote the public good and tranquility He promised to the settlers in the island religious liberty, freedom of trade, and encouragement of native industry, ordered the building of a quay to berth twenty ships, projected the enclosure of the whole city by fortified walls, improved the Government House, which had been constructed from the remains of the old Portuguese house within the castle, established a mint, and built a hospital His most notable work was a thoughtful lay-out of the town "It is," he said, "a city which by God's assistance is intended to be built," and he set about its construction with great foresight

The foundations of law and justice were first laid in the land in Aungier's regime A code of laws was drawn up and a Fair Common House, known to this day as Mapla Por, with its chambers for the courts of justice, warehouses, or granaries, for corn, ammunition, etc., and prisons for offenders, was designed and erected by him The

Court of Directors did not approve the expenditure and "the grandeur he used on the island" Undismayed, the intrepid governor replied "The moneys expended on public appearance were, by serious debate in Council, made suitable for the decency and advantage of your affairs and free from vanity and superfluity" If the reply did not satisfy his masters, he was willing to defray the cost out of his own purse provided the Company paid him reasonable rent for the time that it was used as a Court of Judicature

The security afforded during Aungier's regime attracted to the city merchants of different communities from various parts of the country, fortified by the written assurance that they should "enjoy the free exercise of their religion" Englishmen also came in large numbers, and fearing the disastrous consequence of the intermarriage of the Portuguese with low-caste Indian women, Aungier requested the Company to send out English women to the island On their arrival they were allowed to engage "in any but absolute coolly work," and were given an allowance from the Company for a year, during which time they were expected to marry These women, however, appear to have caused much anxiety to the authorities as would appear from a letter written by the Surat Council in December, 1675 "And whereas you give us notice that some of the women are grown scandalous to our nation, religion, and government, we require you in the Honourable Company's name to give them all fair warning that they do apply themselves to a more sober and Christian conversation



[Photo 'Times of India']
JUNCTION OF ELPHINSTONE CIRCLE
AND BANK ROAD, BOMBAY

otherwise the sentence is this that they shall be confined totally of their liberty to go abroad and fed with bread and water till they are embarked on board ship for England"

Increase in population led to unhealthiness There was no system of drainage, conservancy was neglected, scattered wells were the only sources of supply In the early days, it is stated Commissioners at Bombay asked for some Shiraz wine with which to "encourage the water" Another report speaks of tea made with Bombay water tasting as though it had been stirred with

a red herring The creeks were silting up, the authorities in England issued instructions for the drainage and reclamation of the "drowned lands", but the land imperfectly reclaimed left abominable marshes and swamps The manuring of fields and toddy palms with putrid fish made the breezes of Bombay truly dreadful No wonder Chaplain Ovington wrote that Bombay was "nought but a charnel-house in which two monsoons were the age of a man" By 1691 there were only eighty Englishmen left on the island by 1696, plague having depleted the population, there were only twenty-seven, stricken with gruesome diseases In despair Sir Nicholas Waite, Governor of Bombay, described it as "this unvery-healthful island"

Those were indeed days of darkness and fear At home there were the spectres of disease and dissension The dread hand of fever and pestilence fell alike on European and Indian, rulers as well as the ruled To the horrors of climate were added the troubles of private jealousy and internal disorder Abroad there were the Dutch and the Portuguese, the sea-rovers and the Sidi, the Moghul and the Mahratta All these contributed substantially to the discomfiture of the occupants of Bombay Castle Aurangzeb had even insulted the majesty of Great Britain by tying the hands of her envoys behind their backs and sending the Governor of Bombay about his business There were French alarms also, stories of "three French ships that lay at anchor off Old Woman's Island, weighed and betook themselves to a clean pair of heels" But the British flag survived it all Fortifications were strengthened, outposts were strongly defended, and the fleet was augmented The pirates were then chased from the sea and the Pindaris from the land The Great Moghul was laid low, and the Mahratta Confederacy was destroyed by the Treaty of Bassein The Dutch fleet, which was once the terror of the sea and had hung like a black thundercloud at the mouth of Back Bay, withdrew from the Indian Ocean, and the once powerful Portuguese bade adieu for ever to dominion in India

Within a few years tranquility was restored in the country, and the authorities applied themselves to the task of improving the sanitary condition of the island One of the principal reasons for its extreme unhealthiness was the silting up of the creeks which divided Bombay into a group of islets At high tide the surging sea swept through the breaches, covered the surrounding land with water, and laid "a pestilential deposit which at low tide exhaled mephitic and deadly vapours" The Court of Directors, therefore, incessantly urged the necessity for draining and reclaiming the over-flooded ground Steps were accordingly taken to reclaim the "drowned lands" A causeway was built from Sion to Mahim, and the project of stopping the Great or Mahim Love Grove Beach was taken in hand The dam, constructed after great difficulty, trans-

formed the face of the island completely From an unwholesome swamp it was converted into a salubrious residence The seven disconnected islands taken over from the Portuguese in 1661 had by 1780 become practically one land, and the population, which numbered only ten thousand, had increased to a hundred thousand By the end of the eighteenth century it had nearly doubled The fort was greatly congested, the native inhabitants had raised their houses to a great



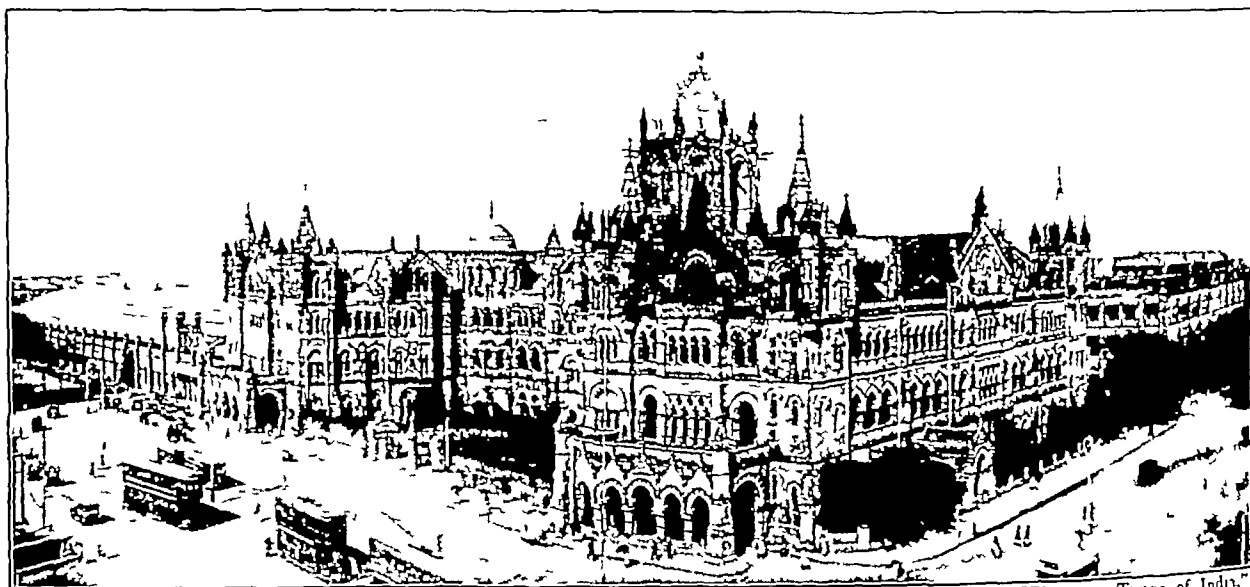
CUFFE PARADE, BOMBAY

height, abutting on narrow and crooked lanes Improvements were talked about, but delayed on some pretext or another until the year 1803, when a violent conflagration mercifully swept away numerous houses in the north of the town This gave the Council the chance to effect improvements within the Fort walls and to construct a new town outside A new settlement soon sprang up within the city limits Dwelling-houses, markets, shops, and godowns, began to rise By this time the outposts of the British had advanced as far as Thana on the east and Bassein on the west The Bombay marine was supreme along the Malabar coast During his visit to the island in 1804 General Wellesley referred with legitimate pride to the increasing channels of wealth "which his conquests had opened to the opulent settlement of Bombay" Writing about the middle of the year 1825 Bishop Heber says "Bombay is the port whence almost all the trade of the West and North is shipped to China and England, there are several ships building in the slips, and the whole place has the appearance of being a flourishing commercial seaport" The opening of railways in the middle of the nineteenth century gave a further impetus to trade In 1844 the Great Indian Peninsular Railway was projected, the first sod was turned at Bombay in 1850, and the first twenty miles to Thana were opened in 1853 In spite of the gloomy forebodings of those prophets of ill who foretold that no native of good caste would ever defile himself by entering a railway carriage railways have multiplied, and their electrification is now in progress Thanks to these facilities the cotton-producing districts have been brought in close touch with the market During the period of boom created by the American Civil

War, multifarious business organisations and financial associations sprang up like mushrooms. The city was crammed with people, a census was taken in 1864 and the number recorded was 816,562. Fresh improvements and reclamation schemes were inaugurated, and handsome works were constructed on either side of the Apollo Bunder, extending south-westward almost to Colaba Church, and stretching from the Custom House to Sewri, along the Mody Bay, Elphinstone, Mazagaon, Tank Bunder, and Frere Reclamations. On the other side was the great Back Bay Reclamation from Colaba to the foot of Malabar Hill. The total area reclaimed measured 4,348,918 square yards. Several new roads were constructed, and also offices and buildings, comprising the Government Secretariat, University Library, Convocation Hall, High

sally-ports, and moats with two great gates strangling the traffic." As these fortifications were no longer necessary, they were accordingly demolished. The malodorous ditch surrounding the Fort was filled in, roads which had been "macadamised with offal and dead dogs" were repaired, and the main drain was covered.

For the first time a portion of the town was lighted with gas on October 7th, 1866. As the lamp-lighters went from lamp to lamp they were followed by crowds of people gazing in mute astonishment at the "new western wonder" that had appeared in their midst. Telegraphic communication with England via the Persian Gulf, first effected in 1866, annihilated distance and made Bombay the commercial centre of Asia. Of the financial speculations of the time the Back Bay Reclamation Scheme was the greatest. At



VICTORIA RAILWAY STATION, BOMBAY

[Photo Times of India.]

Court, Telegraphic Department, Post Office—all in one line facing the sea. Other fine buildings were built in other parts of the city, such as the Elphinstone College, Elphinstone High School, School of Art, Goculdas Lejal Hospital, Sailors' Home, and the Victoria and the Albert Museum. To this period also belongs the lay-out of the Elphinstone Circle.

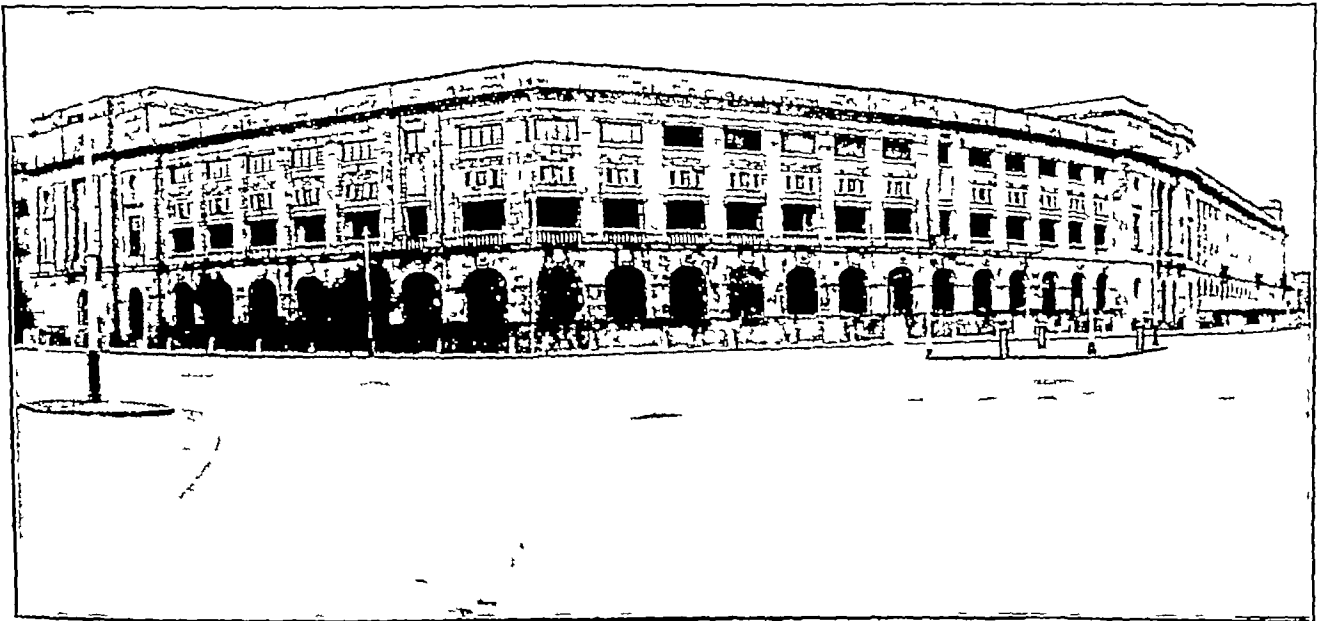
Private citizens were not slow to follow the lead of the Governor, Sir Bartle Frere, in improving and embellishing the city. Notable among them were Premchand Roychand, the uncrowned king of Bombay, who gave four lakhs of rupees for a University Library Building and a tower named after his mother, "Rajabai Tower", David Sassoon, who endowed the Sassoon Mechanic Institute, Jamshedji Jeejeebhoy, to whose munificence the School of Art and the Sir J. J. Hospital owe their existence, and Cowasji Jehangir, who presented an Ophthalmic Hospital to the city.

At Churchgate there had been a network of fortifications, "a wilderness of embattled walls,

the height of the boom the Company's shares of Rs 2,000 each sold for Rs 50,000. When the bubble burst the most notable failure was that of the Company. The scheme was one of the soundest launched during those giddy days, but ten million rupees were lost by it, and it ended in liquidation. The reason for its ruin was not its own weakness but the fact that nine million rupees of its funds had been placed on fixed deposit in the Asiatic Bank. When that bank closed its doors, the Company also succumbed because the shareholders, filled with alarm, insisted on a winding up. But what the short-sighted shareholders lost, the Government gained. The Reclamation Companies were swept into bankruptcy, but they left the island four miles larger than they had found it. Further reclamation was in great disfavour until the Bombay Improvement Trust, created in 1898, decided to reclaim a small area at Colaba. Its success encouraged a Development Committee, appointed during Lord Sidenham's regime, to revive the proposal for

reclamations on an extensive scale. Its report was, however, shelved owing to the crippled resources of Government in consequence of the world war. During and immediately after the war there was a house famine in Bombay, so that soon after the cessation of hostilities Lord Lloyd's Government embarked on their costly schemes of reclamation and development. A Development Directorate was specially created to prosecute the schemes as vigorously and as expeditiously as possible. Expense was no consideration. Time was the essence of the undertaking for those charged with the special duty of carrying out the behests of the imperious and impetuous Governor concerning these projects. So long as he was in Bombay he heard nothing but praise for his far-sighted policy to meet the extreme need of housing the overcrowded popula-

Despite the blunders and lapses of the early Governors, the rebellion of Keigwin and the deadliest of climates that mowed down the early British settlers before the reaper's sickle, the far-seeing Dr Fryer suggested, so early as 1675, that "out of all this scum there might arise another Carthage." To-day that prophecy is fulfilled beyond the dreams of the soothsayer. On the barren island ceded to the English by the Portuguese a noble city has arisen. Romantic as is the story of its continuous growth, it forms one of the brightest and most inspiring episodes in the history of India. In the earlier years this achievement involved, as already noted, a dire holocaust. It cost the lives of as many as seven Governors in one generation, not to mention other dignitaries and officials. But the authorities persevered with dogged determination to build the city which, by



THE SCIENCE COLLEGE, BOMBAY.

[Photo 'Times of India']

tion and improving the slum conditions of what he had dubbed "a city of dearth and death." But as soon as his back was turned, the oracles that had been dumb before created a hideous hum in the Council-Chamber, breathing anathema on what was denounced as a huge failure and a swindle on the public purse. Unfortunately the project proved ruinous. Government appointed a Committee of experts to advise in the matter. The Committee pointed out the folly of abandoning the works altogether and recommended completion of certain sections. This recommendation was accepted by the Council, the works are now very nearly completed, and the reclaimed area will, besides meeting the need of the military authorities, provide new sites for admirable residences.

A separate volume would be required to relate the efforts made to improve, develop, and embellish the city during the British regime. Nothing but a visit can give an idea of its marvellous growth.

God's assistance, was intended to be built. Periods of progress have alternated with periods of pause or set-back, but on the whole the progress made with all those great works of public sanitation, comfort, and convenience, which are essential for a growing city, has been remarkable. From 10,000 in 1662 the population has increased to 1,250,000. From a fishing hamlet the island has grown into a salubrious maritime port, and has come to be recognised not only as the main gate of communication between India and the western world, but also as a royal city. "Bombay of to-day," said Sir Edwin Arnold in 1886, "is hardly recognisable to one who knew the place in the time of the Mutiny and in those years which followed it. Augustus said of Rome, 'I found it mud, I leave it marble', and the visitor to India after so long an absence as mine might justly exclaim, 'I left Bombay a town of warehouses and offices, and I find her a city of parks and palaces'." Since then further improvements have

been made, the Bombay Port Trust, the Improvement Trust, the Bombay Municipality, and the Development Department have during the last thirty years, and the railway companies and other public utility companies have in mutual co-operation, carried out such wonderful improvements and transformations that to those who quitted the city thirty years ago, it would now be almost unrecognisable. To quote the striking words of James Douglas "As from the slime and miasma of some geologic era, an island city rose strong from the bosom of the sea, fair to look upon, green with the verdure of an eternal summer, beautiful as Tyre and more populous than either ancient Carthage or Alexandria—crowned not only with the monuments of human industry, but with buildings to teach men the art of being industrious, with a Government India had never known before, that protects the weak from the oppression of the strong, and measures out equal land to everyone irrespective of his colour or his creed."

It is pleasing to reflect that this happy transformation is the result of the joint efforts of Englishmen and Indians working together in friendly co-operation for a common object. In this spirit of unison manifested by myriads of people divided by race and by religion is contained and typified the secret upon which the future welfare of the city and of the entire Indian Empire depends.

Inhabitants

The oldest inhabitants of Bombay were the Palshiker Brahmans, the *Hindus*, Pathare Prabhus, Bhandaris, Panchkalshis, Agris, and Kolis, and to-day also the Hindus form the bulk of the population of what is perhaps the most cosmopolitan city, next to London, in the world. They are divided into numerous castes, speak different languages, and have different habits, manners, and customs. Those coming from Gujarat and Kathiawad speak Gujarati, those from the Deccan speak Marathi, while those hailing from Central and Northern India speak Hindi. The Lingayets, the Kamatis, and the Madrasis come from Southern India, while the Sikhs, the Kashmeeris, and the Multanis come from Northern India. The Sindhis come from the West and the Bengalis from the East.

Their caste system is the despair of the ethnologist, but of the numerous classes and sub-classes, the following main four divisions may be noted: the Brahmin, the Kshatriya, the Vaishya, and the Shudra. To the first-named belongs the literary and priestly class, to the second the warrior class, to the third the artisan class, and to the fourth the labouring class. All these live in water-tight compartments, though professing the same faith. Persons of near castes may dine together but cannot intermarry, although there is scarcely any difference between them regarding their origin, language, religion, customs, and habits.

The Brahmin is the aristocrat of Hindu society.

He does not mix with anyone. The mere touch of a non-Brahmin means pollution and requires a ceremonial bath. When he takes his meals, he draws a circle in which he sits. Before him is placed a metal plate or leaf on which his food is served. None can step into that magic circle, not even his wife who waits on him. The high-class Hindus generally adopt the same attitude of exclusiveness in their relations with non-Hindus, or even Hindus of a different class.

The Jains are also classed as Hindus, but they follow a form of Buddhism known as Jainism. They hold any form of life sacred, are strict vegetarians, and will not kill even an insect. Lest they should kill the germs found in water some of these people even abstain from baths! It is believed that for the same reason they do not eat anything that grows under ground, such as potato or carrot, which may contain insects!

The dress of the Hindu consists of a *dhotar*, a tunic, and a cap or a turban. The *dhotar* is a kind of soft cotton cloth which he winds round his waist. It passes between his legs, the loose flaps hanging down—a clumsy and ungainly costume which educated Hindus have been gradually discarding in favour of trousers.

Marriage is considered by the Hindus one of the most important events in life and is celebrated with great *eclat*. The astrologer is consulted, after seeing the horoscope he fixes the month, day, hour, and even the second when the various ceremonies connected with the event should be performed. However poor, a Hindu will spend large sums of money in celebrating a wedding, on lights, decorations, music, and festivities, no matter if he runs into debt which casts a gloom over all the remaining days of his life.

In contrast with the wedding ceremony, the funeral ceremony of the Hindus is very simple. The body is washed and covered with a red powder and flowers. It is then laid out on a bier of bamboo and dried palm leaves, and carried on the shoulders of relatives to the burning ground, generally with the accompaniment of music in the case of the lower classes. The eldest son carries the embers in a pot and fires the pyre. After a death the nearest relatives shave clean.

Mahomedans

Next in number come the Mohomedans. They have migrated to Bombay from all parts of the country, and are divided into two principal sects, the Sunnis and the Shias. The latter constitute only about one-sixth of the Mahomedan population. The point of difference between these two sects is that the Sunnis consider *Abubaker*, *Uma*, and *Uthman* as the lawful *Khalifas*, or successors of the Prophet, whereas the Shias recognise only the fourth *Khalifa*, and his sons, *Hasan* and *Hussein*, the lawful *Khalifas*. In Bombay the Mahomedans, the Memons, the Deccanis, and the Konkanis are Sunnis. The Shias are divided into sects.

sections—the Moguls, or Persians, the Khojas, the Borahs, and the Shias of Hindustan

The Moguls

The Moguls, or Persians, are real Shias, who celebrate the Mohurum festival held in honour of Hassan and Hussein, sons of Ali and Fatima, the daughter of the Prophet, who were slain at Kerbala. The occasion is regarded by them as a period of mourning and lamentation. The Sunnis, on the other hand, regard it as an occasion for frolic and mummery. Until recently the rival demonstrations of the two sects became a public nuisance and a menace to public safety. Brawls were frequent between the toils, or street bands, of the two sects, heads were broken, and the city was practically in the hands of the lawless mob during the ten days of this festival of tears. It was considered impossible to stop these outbursts of fanaticism, but a courageous Commissioner of Police, the late Mr S. M. Edwardes, at last succeeded in putting a stop to the practice of taking the *Taboot* (the representation of the tomb) through the streets, thus removing the cause of the riots.

The Memons

The Memons (*Muamims* or Believers) are converts to Islam from the Lohana and Cutchi Bania castes. They flourished in Surat during the palmy days of that city, but as it sank into insignificance they moved southwards to Bombay. In the early years of the nineteenth century they appear to have opened tailoring establishments, but as Bombay advanced in commercial progress they captured every class of trade, with the result that they include among their number some of the most opulent citizens of Bombay.

The Borahs

The Borahs are also descendants of Hindu converts to Islam. The original conversions are said to have taken place at Cambay, Aurungabad, and other places, in the fourth and fifth centuries of the Mahomedan era, when the Khalifa of Egypt sent forth missionaries to India. The community is divided into four main sections—Sunnī, Daudī, Aliya, and Sulemanī. More than three hundred years ago the Daudīs, who are numerically the largest, separated from the Sulemanīs, who in point of number are the smallest, over a dispute as to who was the rightful Dai, Daud, or Suleman. A large portion of the Sulemanī sect is settled on the Western Coast of Arabia, and a small section that has settled in India has attained a prominent position in Indian society. It is the pride of this community that it has supplied Bombay with her first Mahomedan barrister, her first Mahomedan solicitor, and engineer. But it is not so much in learned professions as in the pursuit of commerce that the Borah generally excels. He is found in most of the towns of Gujarat and Kathiawad, in

Bombay, and the Deccan, and in Siam, China, Arabia, and Africa, engaged in every trade and every branch of commerce, from retail shop-keeping and tin-working to that of the broker, contractor, and exploiter of industries.

The Khojas

The Khojas trace their descent from Hindu converts of Cutch, Gujarat, and Kathiawad, and profess the Shia Creed. Although small in number, like the Parsis, they form one of the most interesting, enlightened, enterprising, and prospering communities of Bombay. They pay homage to the Aga Khan, the direct descendant of the sixth Imam, as their spiritual or religious head, and are known as Ismaelia Khojas. So great is their veneration for His Highness the Aga Khan that the more ignorant of them, particularly the women, worship him as a deity. But such hero-worship is distasteful to a section of the community, which has, therefore, seceded from the spiritual sway of the Aga Khan, established a separate sect called the Isnasheri, and built its own mosque. These reformers are striving to purge their religion of abuses and to introduce into it puritanical doctrines acceptable to modern thought.

The Khojas are a peaceful and law-abiding people. Perhaps the least bigoted amongst the Mahomedans, they have taken more freely to education than their other co-religionists, and they resemble the Parsis in many respects, particularly in their treatment of women, so that their women hold their own to-day in intelligence and culture with those of any other community in Bombay.

The Arabs and the Jews

The cosmopolitan population of Bombay includes not a few Arabs and Jews. They come mostly from Bagdad. The Arabs as a class are a flourishing community, many of them being traders, importers of horses, pearls, and dates. The Jews are mostly indigent, and no wonder they are generally indolent. At the same time Bombay owes not a little to the commercial enterprise and munificence of the Jews. The family name of Sassoon is a household word in Bombay.

The Indian Christians

Another noteworthy community in Bombay is that of the Indian Christians, who are mostly Roman Catholics, the descendants of Portuguese converts. A small number belong to the Protestant Church, chiefly the American Church. Thanks to the efforts of the missionaries, they have been lifted from the lowliest status in Hindu society—most of them belonging to the depressed classes. Having been educated and settled in life by the missionaries, they form to-day a law-abiding and respectable section of the population.

The Indian Roman Catholics are divided into

four sections The Goans, who come from Goa, the Mangalorians and the Madrasis from Southern India, and the East Indians from Bombay and Salsette These communities, differing in their nationalities, differ also considerably in their manners, languages, and disposition, although embracing the same creed

The Goans

Goa is a Portuguese territory about two hundred miles south of Bombay It is too poor to support its Christian population, which flocks to Bombay as do the Iranis from Persia They are by no means unwelcome visitors, as many of them get employed as domestic servants, and mitigate to a considerable extent the hardships of *memsahibs* harassed or deserted by their cooks and ayahs The missions provide ample facilities for the education of these people, so that not a few of them enter the liberal professions and distinguish themselves in public service To the debit side may be placed the epidemic of smallpox which they either bring from Goa or help in spreading in the city, being as a rule unvaccinated It is strange that in spite of the ravages of that disease this community has not yet taken kindly to vaccination The Goans are staunch Roman Catholics and venerate the body of Saint Francis Xavier at Goa, in whose miracles they implicitly believe No wonder a large section is bigoted and superstitious They speak the Goanese language with a peculiar nasal twang

The Mangalorians.

Coming from Mangalore in Southern India, and speaking a language akin to that of the Goans, the Mangalorians are also Roman Catholics They have not, however, much in common with the Goans While the devotees of Saint Francis Xavier are not dissociated from the pleasures of wine and music, the Mangalorians are a sober, hard-working, and thrifty race They are often blamed for being clannish, but in a country inhabited by people professing numerous faiths this is a characteristic not exclusively of the Mangalorians

The East Indians

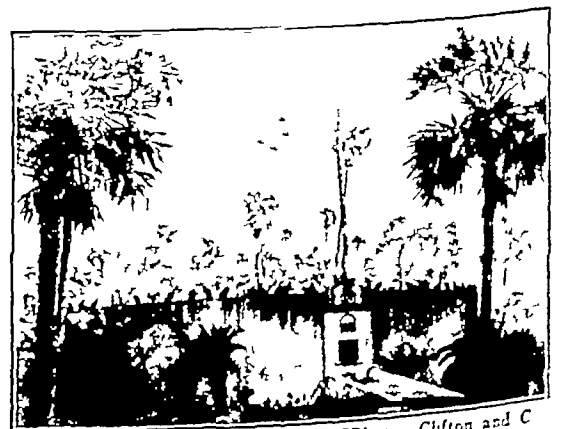
Paradoxical as it seems, this quiet and good-mannered community comes from the Western Coast of India, being descendants of Hindu cultivators in Salsette converted by the Portuguese to Christianity They still speak a corrupted Portuguese dialect and have Portuguese names As a class they are comparatively fairly well educated, but being intensely religious they are a priest-ridden community, and are staunch followers of the cult of the Sacred Heart of Jesus, the image of which occupies a conspicuous place in their homes

The Anglo-Indians

By no means an unimportant community, the Anglo-Indians are descendants of early European settlers who married Indian women Until recently they were known as Eurasians, but owing to the offensive manner in which that term came to be applied, the new name was adopted, although even this does not appear to have given general satisfaction Their pride and perplexity are thus vividly described by a writer

" Their greatest pride is that they are descended from Europeans They always speak of England as ' home,' though it is a home they have never seen and do not know The fair-hued among them style themselves Europeans, and wish to be known as such It is a pity that many of them are ashamed to own that they are of mixed parentage They have studied very closely the snobbishness of certain real Europeans, who frequently boast in their hearing of their pure descent and the enormous advantage of being pure Europeans For this reason there is nothing that the Anglo-Indian deplors more than his dark skin He would give anything in the world to become as fair as a European So strong is this weakness that he is always lamenting over his colour, and he attributes all his misfortunes to it He would rather see his daughter married to a low, vulgar European and be ill-treated afterwards than see her marry one of her own kind The Anglo-Indians have great disdain for the Indians, whom they treat with contempt "

Despite this pride of European descent the community has remained comparatively backward in education A kind-hearted Government hitherto reserved for them appointments in the Customs, the Railway, and Telegraph Departments and the subordinate Medical Department But with a growing self-conscious Indian population this preferential treatment cannot continue for ever, and the problem of problems for the community is how to compete with the other communities in India in its struggle for existence



[Photo Clifton and C
PARSI TOWER OF SILENCE, BOMBAY.

The Parsis.

" There are other shop-keepers who are named Coaris, and in the kingdom of Cambay they call them Esparcis, and we, the Portuguese, call them Jews "

In connection with the history of Bombay this is the first mention of the handful of Zoroastrians who have played the most conspicuous part in its transformation from a fishing hamlet to a flourishing seaport and centre of international commerce. It was the Portuguese physician and botanist, Garcia da Orta, who owned the island about the year 1554, who thus referred to the community in his *Colloquios* (Conversations on the drugs and simples of India). True, the Portuguese of that period called these followers of Zoroaster Jews, but Garcia da Orta pointed out that they were not Jews but " Gentiles who came from Persia " " When one dies," he adds, " they take him by another door and not by that they serve themselves, have sepulchres where they are laid down when dead, and placed there until dissolved, they look to the East, are not circumcised, nor is it forbidden them to eat pork, but it is forbidden to eat beef. And for these reasons you will see that they are not Jews "

This erudite son of Æsculapius no doubt knew better than his contemporaries. The Parsis who have lived in India for nearly thirteen centuries trace their descent from an ancestry that flourished in Persia in prehistoric days, when they brought " the demons and giants " to their knees, and extended their sway in every direction. One of their earliest kings, Jamshed, was the first sovereign to introduce and regulate the calendar and to celebrate the vernal equinox, which was called *Jamshedi Naoroz*, or the New Year's Day (March 21st). Generation succeeded generation. The famous heroes Zal, Rustom, and Sohrab, distinguished themselves and their community by their prowess, but the crowning event in the history of this race was reserved for the reign of the great king Gustasp, who flourished, according to some, in the year 1300 B C, and according to others many more centuries before that date. It was in his reign that Zoroaster, the Prophet of the Parsis, was born.

The Parsi scriptures are written in the Avesta language, which bears some similarity to the Sanskrit. The leading idea of Zoroaster's creed was monotheism, but the principle of his speculative philosophy was dualism—the existence of two primeval causes, the real world and the intellectual, and his moral philosophy was a triad of good thought, good word, and good deed. The Parsis hold fire to be the most perfect symbol of the Deity, on account of its purity, brightness, activity, subtilty, fecundity, and incorruptibility. Hence they have come to be regarded as fire-worshippers, but Sir John Malcolm and other historians have repeatedly pointed out that that is a misnomer.



[Photo Rembrandt Studios]
PARSI LADY.

The foundation of the Persian Empire was laid in the days of Cyrus the Great, who flourished in the sixth century before Christ. The most powerful potentate of his age, he vanquished the Medians

and Ninevite monarchs, occupied Kashgar and Yarkand, subdued the whole of the Babylonian Empire, conquered Palestine, set the Jews at liberty, and allowed them to establish themselves at Jerusalem and to rebuild their temple. His son, Cambysses, brought Egypt within the orbit of his empire, and his successor Darius penetrated India as far as the Punjab, annexed the valley of the Indus, and established connection between Persia and India by water. He conquered Bysantium and Macedonia and overran the south of Europe, but was repulsed by the Greeks at the battle of Marathon. His son, Xerxes, also met with reverses at sea, although he was successful on land, and since that date the Persians never again essayed the conquest of Greece. But Shapoor, the famous Sassanian monarch, led an invasion of the Roman Empire. His successor, Noshirvan, "the Just," obtained some signal victories over the Romans, but after him there was none to uphold the standard of Zoroastrianism. As in the case of other great nations, so also with the Parsis, the luxury and ease, born of prosperity, and internal dissensions, undermined the internal strength of the empire, and its fate was sealed by the battle of Nahavand in 641 A.D., when the Persians suffered crushing defeat at the hands of the Arabs. Most of the conquered people embraced Islam, a few, however, preferred to abandon their homes.

In the story of their exodus fact and fiction have been blended together, but it seems fairly certain that the first place in India at which they arrived was Diu, a small island in the Gulf of Cambay, on the Kathiawad Coast. Here they lived for a few years and then migrated to Sanjan, where they enthroned the sacred fire Iranshah, whence it was removed to other places and ultimately to Udwada, where it has been kept glowing till this day.

Tradition relates that when the Parsis first set their feet on the soil of Sanjan, they deputed their high priest to interview the Hindu Chief Jaji Rana, who, on being apprised of the woes of the refugees, assigned to them a tract of land on condition that they should adopt the language of the country, adopt the Hindu dress, abstain from the slaughter of cows, and perform their marriage ceremonies in conformity with the customs obtaining among the Hindus. Within a few years of their settlement in Sanjan, the Parsis converted the desert assigned to them into a garden, and as their numbers increased they migrated to Cambay, Ankleshwar, Surat, and other places throughout India, and lived on cordial terms with their neighbours for about five centuries.

To the Hindus they always remained faithful and assisted them against their Mahomedan foes. On one occasion, when a Mahomedan king invaded Sanjan, about the year 1305, the Parsis fought a sanguinary battle under the leadership of their commander Ardeshir and assisted the Hindus in repulsing the Moslem attack.

No authentic evidence exists as to the time of arrival of the Parsis in Bombay, but from the foregoing extract from Garcia da Orta's *Colloquies* it appears that before the English factors induced them to settle in the island, they had gone there and distinguished themselves as a community of shop-keepers. They served as middlemen between the Portuguese authorities and the native population, and when the English arrived in Bombay they served them in the same capacity. That their number must have been considerable by the middle of the seventeenth century is evidenced by the fact that when Fryer visited the island he saw the Tower of Silence, which he called a Parsi tomb. "On the other side of the great inlet to the sea," he remarked, "is a great point, abutting against Old Woman's Island, and is called Malabar Hill, a rocky, woody mountain, yet sends forth long grass, atop of all is a Parsi tomb lately reared."

Two Parsis distinguished themselves during the early days of the British regime—Rustom Dornaji and Lowji Wadia. In 1692 Rustom assisted with a body of Kolis to repel the invasion of the Sidi. For this service he was appointed Patel of Bombay, with authority to settle domestic disputes of the people. His son, Cowasji, built in later years a tank which has led to the family name being associated with the Cowasji Patel Tank Road running along the site of the tank. Lowji's name has been linked with the story of the Bombay Dockyard. In the year 1735 an agent of the East India Company, charged with the building of a new ship, induced Lowji to go from Surat to Bombay with his artificers to assist in the mission. For several generations Lowji and his descendants were the master builders of the Dockyard.

To-day the Parsis are undoubtedly in the forefront of all progressive movements. Their numerical strength is only a hundred thousand spread all over India—a drop in the mighty ocean of India's varied population, which numbers three hundred and thirty millions, and yet this small community leads in education, commerce, and industry. Not only has it produced many an eminent lawyer, physician, surgeon, architect, and captain of industry, but its sons have also distinguished themselves in public service. Although not so conspicuous to-day in politics, some of the most prominent pioneers of political reform were Parsis—Dadabhai Naoroji, Phirozeshah Mehta, and Dinsha Wacha. The last-named, on whom Government has conferred the honour of knighthood, and who was at one time considered the most uncompromising critic of Government and exponent of extremism, is now an advocate of moderation, and one of the most esteemed supporters of Government in its policy of progressive reforms.

The Parsi women are the most educated women in the country, and this is the reason why the domestic and social life of the Parsis resembles all important particulars that of the English. This also accounts for the foremost place occupied

by the community in all social movements. In clubs, receptions, civic functions, public exhibitions, charity shows, etc., Parsi women come forward in large numbers to assist and embellish. Their dress is very elegant and refined. Although it is becoming gradually Europeanised, it still retains its distinguishing charm, and has always excited the admiration of the European. Their beautifully coloured silk "saris" with embroidered borders are the envy of the memsahib, and there is no more picturesque dress in the world to set off the beauty of the feminine face and figure. At one time the Hindu mode of bedecking the necks, ears, noses, and wrists of women with jewellery was the rule, now the European fashion of wearing diamond and pearl ornaments is in vogue. Similarly, the custom of segregating women away from men on ceremonial occasions is dying out, they now mingle freely with their male friends, and occupy an independent position in society. This need not be put down to western ideas. It only means the renaissance of the ancient Persian culture on the soil of India, for the position of Persian women in ancient times was in no way inferior to that of the Parsi women to-day. It is recorded in history that when Amintus, King of Macedonia, entertained the Persian ambassador at his Court, the distinguished Persian, in acknowledging his toast, expressed his regret that no ladies were present on the occasion as was the custom in his own country, and he added that without those fair companions the happiness of the company could not be complete.

The costume of the men has undergone a great metamorphosis, and it seems to obey no law. It is neither the original Iranian dress nor that adopted by their ancestors in India after the fashion of the Hindus. Fifty years ago many of them wore crimson trousers, a white long coat, and a chumney-shaped turban made of black glazed cloth. Now a good many have adopted the European style of raiment, and the old-fashioned have abandoned the turban and the trousers of their forbears. They wear a *dagla*, a sort of frockcoat buttoning up to the neck, and trousers of the European cut. The head-dress consists mainly of a hard, round grey felt hat with rounded border, like a rimless bowler.

The full ceremonial dress hitherto consisted of a *jama* and *pirhori* of white linen. The *jama* is a long double-breasted coat, the lower portions hanging in folds to the ankle and resembling the gown of a European woman. The *pirhori* is a long piece of cloth wound round the *jama* about the waist. This dress is now out of fashion. The *pirhori* is dispensed with and a long white coat does duty for the *jama*. The trousers must also be white for ceremonial occasions.

Next to the skin both men and women wear a *sudra* or sacred shirt, with a symbol affixed to it, and a *kusti*, which is a girdle made of lamb's wool. This is wound round the shirt in three folds and is united and tied again each time they pray.

The process of winding the *kusti* round the waist is a reminder of the principal tenets of their religion, which are summed up in the triad of good thought, good words, good deeds.

The Parsi does not smoke. It is believed to be contrary to the tenets of Zoroastrianism to bring such a pure element of Nature as fire into contact with the mouth, which is deemed impure. But although the habit is repugnant to the majority, a considerable section of the community is now seen smoking openly in railway trains and restaurants.

The wedding ceremony of the community is still very much like that of the Hindus owing to customs adopted by long association with the latter. Two priests, robed in white, chant prayers in Zend and Sanscrit. At the end of the ceremony women do not kiss the bride, but touch her head and then their own, and press the half-clenched fingers of both hands against each temple, the finger-joints emitting a crackling sound. This is done in a graceful manner, and the custom signifies that all the future troubles of the bride are taken over their own heads by the other women.

The funeral is an elaborate ceremony. On this occasion also two priests robed in white recite prayers. The body is then consigned to white-robed porters gloved in white. Their heads and mouths are also covered with white cloth. They carry the body on an iron bier ahead of the cortège. The mourners, dressed in white, follow on foot, in pairs, each couple holding a handkerchief between them as a symbol of union in silent sympathy as they march along to the Tower of Silence. After they arrive there the carriers only are allowed to approach the place where the body is deposited, exposed to the vultures hovering around them. The mourners remain standing at a distance and disperse after the last prayers.

Bombay owes a good deal of her prosperity to the ability, enterprise, and public spirit of the Parsis, but the quality for which the community is mostly esteemed is its liberality. They have freely given for the education and medical relief of the poor and middle classes of the population. Numerous public institutions owe their origin to the large-hearted donations of the Parsis, so that the name Parsi is held throughout India as a synonym for philanthropy.

Street Scenes and Impressions

India is perhaps the most cosmopolitan country in the world, and Bombay its most cosmopolitan city, displaying within its circuit of about 25 miles an infinite variety of human types not to be found on so small a space in any other part of the world. Here, if anywhere, East meets with West. Here is English life, residences of the European type, churches and chapels, colleges and libraries, clubs and gymkhanas, restaurants and hotels, jetties and wharves, custom-houses and law courts, electric trams and motor buses, groves and gardens, swimming baths and recreation grounds.

theatres and public halls, beautiful avenues, clean and smooth thoroughfares—everything, in brief, associated with the cities in the West. In close juxtaposition is the native town where people of every shade of the Asiatic stock are seen herded in hundreds to the acre in tall, ill-ventilated houses



[Photo Clifton and Co

MILK CARRIER, BOMBAY

lining on both sides narrow, winding, and squalid streets. Here is seen the flotsam and jetsam of society drifting with the tide of urban life in a variety of directions. Here are naked children squatting in unpaved and unmetalled streets, the mother, perchance, busy preparing cow-dung cakes, and the father, a weaver, is twirling his green and amber wool on a hand loom in a dark, smoke-begrimed room in a hovel opposite. Every where in the native quarters the nostrils are assailed by horrible smells despite the fragrance of spicy *kababs* and *pillaus* and roasted liver

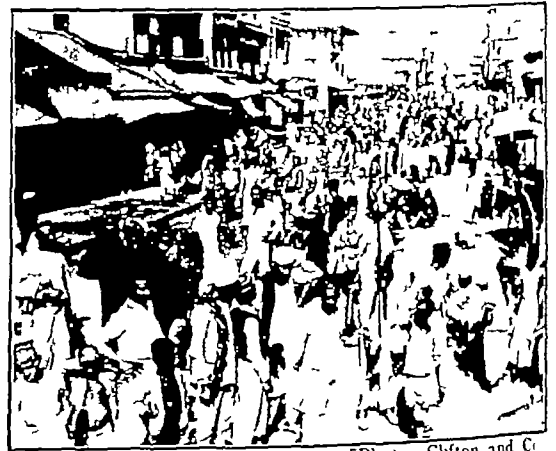


[Photo Clifton and Co

MILK SHOP, BOMBAY

Here comes a pretty fruit-seller, a belle from the Deccan, balancing her basket of mangoes and bananas on her head. She is followed by another hawker pushing his hand-cart loaded with half-rotten fruits, plantains and oranges, melons and mangoes, grapes and pears, walnuts and *cardaloes*, *kajus* and *lismis*. He shouts his wares at the top of his voice, and above all the noise and clamour

of this busy thoroughfare is heard also the welcome call of the blessed milkman, carrying a bluish-white liquid in a brass-pot stuffed with straw to prevent the milk from spilling. Farther along is the sweetmeat seller singing the praises of his *malpura*, wheat-cakes, and *jalebi*, a sort of sweetened macaroni, both supposed to have been fried in *ghi* (butter) but smelling of oil. Next comes the itinerant *kahwe-wallah* or coffee seller, mostly of Arab or Egyptian origin, carrying in one hand a large number of coffee-cups fitted within each other, and in the other hand is a portable stove on which is balanced his tin kettle. From the opposite direction comes the vendor of *chah garam* (hot tea). He can obviously blow hot and cold, for, with the tea kettle, he carries bottles of sherbet (cold drinks) and cans of ice cream. Within a distance of ten yards may be found half a dozen fakirs chanting prayers or reciting in doleful tones the pathetic story of their starving selves. In this country of hypersensitive



[Photo Clifton and Co

STREET SCENE, BOMBAY

clemency and hyperbolic piety, begging is reduced to a fine art, and it is no exaggeration to say that there is not a beggar in Bombay that starves. Here in a corner are two men crouching in the dust by the side of the wall of a house abutting on to the street. One is the master of the house, naked to the waist, while the other is his barber, a respectable young representative of his guild, attired in robe and turban. The whole toilet is performed in full view of the neighbours and passers-by, to whom the spectacle of the razor passing not merely over the chin but over the head and armpits as well, is an operation which is very familiar. And who is the tall person emerging from that narrow lane with a chimney-shaped basket balanced on his head? He is the *halalkhore* or sweeper, who is making one of his trips to the night-soil depôt. The house gully, from which the *halalkhore* has emerged, is reeking with filth and garbage. In fact, the entire street is littered with remnants of food and other refuse, upon which rats feed. Cats in deplorable condition are also on the thresholds and verandahs, cows and goats are tied to the railings, and dogs fight for bones and

odds and ends of garbage. There are also a few stray cattle nosing hungrily amongst the refuse of the street, unheeded by any and heedless of the traffic.

Such is Bombay, the capital of the Western Presidency, the eye of India, one of the most impressive cities in the Orient—a city of vast and amazing contrasts, savagery and civilisation in close juxtaposition, poverty and plenty, beauty and ugliness, piety and sinfulness mixing and blending so completely as to present a curious spectacle of homogeneity. In the main arteries of the city are seen people in the most primitive stage of civilisation rubbing shoulders with types of all nations—an unsurpassed variety of human beings, white and brown, yellow and black, their costumes varying from the frock-coat to the loin-cloth. Bewildering as is the medley of these people, the faiths to which they scrupulously subscribe are no less varied. Hinduism with its many sub-divisions, Mahomedanism in its different

white coat and trousers and white turban and flowing beard, resembles the Parsi priest, but is by faith a staunch Mussulman. There are also the Abyssinian and the Somali negroes, clad in striped waist cloth or in long white shirt and red fez. Differing altogether in features and apparel



[Photo Clifton and Co

GUJARAT WOMEN, BOMBAY.

are the Hindus of different castes in varying garb, including the corpulent Bania from Gujarat, clad in a long coat and *dhoti* (a soft cloth wound round the waist), his forehead besmeared with red paint and his head decked with a rich red turban, the sleek Hindu, from the north of India, in soft muslin, the long-haired Rajput with Hellenic features and stately beard parted in the middle, his head ornamented with a turban consisting of a score of yards of fine white muslin and his manly figure bedecked with necklaces and ear-rings, the Mahratta with his crown clean-shaven save for a solitary central lock of hair hanging over his shoulders. Then there is the man from Bengal, the land of the most learned sons of the Orient, bareheaded all the year round, wrapped in the



[Photo D N Thomas

STREET FRUIT SELLER, BOMBAY.

forms, Jainism, Judaism, Zoroastrianism, and last, but not the least, Christianity in its Western and Eastern garb, for in Bombay Indians of all the castes have been converted to Christianity by the proselytizing zeal of the Jesuits and Franciscans ever since St. George's Cross was raised over Bombay Castle.

None can beat the *Sahib* in the estimation of the multitude, his *topce*, or hat, being the emblem of pomp and power. Besides almost all types of Europeans, including soldiers and sailors, there is the Europeanised Parsi, who presents a vivid contrast to his orthodox co-religionist clad in long black coat and western trousers and a shining black oilcloth mitre. The Bombay Mahomedan with his long white shirt, white trousers, and skull-cap of brocade, is everywhere. Picturesque are the Khoja with his gold turban and long coat and trousers, the Mogul horsedealer from Persia, with his high Astrakhan cap, the Arab from Syria in his Biblical costume, the tall Pathan from Baluchistan in the baggiest of trousers, Afghans and Mahrattas distinguished not by their costume but by their physiognomy. The Borah with his long



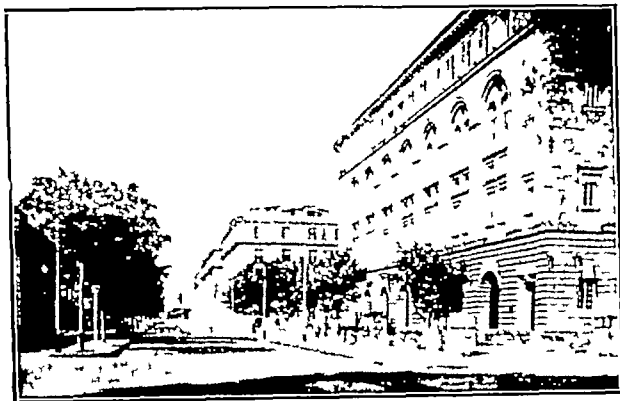
[Photo D N Thomas

FORTUNE TELLER.

proud folds of a white *toga* unlike akin to the garb of the ancient Roman senators. There are also to be seen Jews in long robes and mantles, their dress half Persian, half Moorish, and Armenian priests with flowing robes and beards vying with the Portuguese clergy in the gravity of their garb. In Bombay, too, are Chinese and Japanese in European attire. Malays in English jackets and

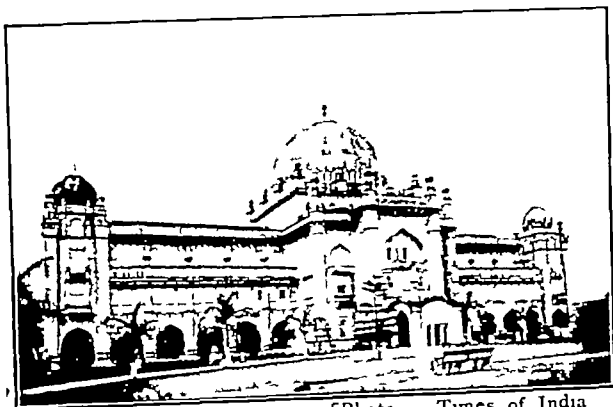
loose turbans, Turks of majestic mien, and Tartars from Bokhara and Samarcand in tall sheep-skin caps and woollen gabardines

There is no *purdah* in this modern city, and the variety of its women-folk is even more interesting. Here, for instance, are Memon and Khoja women



NICOL ROAD, BALLARD ESTATE, BOMBAY

in *kurta* (shirt) and *izar* (trousers) of varied colours, with dark blue sheets used as veils, and Hindu women in exquisite sarees and *cholis* (jackets with short sleeves). The latter wear necklaces of gold beads, bangles of glass or gold or silver are on their arms and ankles, and costly rings adorn not only their fingers but noses and toes. Most impressive of all are the Parsi ladies, their brilliantly coloured sarees of silk arranged over the head like a veil and brought over the right shoulder, across the bosom, falling artistically in folds to the feet. Graceful is the gait of these belles of different races, including the English ladies in the latest Paris and London



[Photo Times of India]
PRINCE OF WALES MUSEUM, BOMBAY

fashions, but no less graceful is the trot of the tight-girt and flower-decked Koli woman as she hies to the market with her head-load of glistening fish brought fresh from the sea.

Into the kaleidoscope comes the impetuous *Victoriahualla* (cabman) of the Chilichor tribe, with his khaki clothes, red fez, and unbridled tongue. He is driving a British "Tommy," a new arrival, through the streets, and feels, therefore,

entitled to play havoc with the pedestrian traffic as he pleases.

So ever flows the flood tide of humanity in the streets of the wonderful city.

The cosmopolitan crowd represents every community, every caste, every profession, every creed of almost every nation in the world. During a short time spent in only one of the thoroughfares of Bombay scenes may be witnessed which justify the remarks made nearly a century ago by Basil Hall in his *Fragments of Voyages*. "I think it may be said with truth that we can see nothing in China, or Java, or the Philippine Islands, or along the Malay Peninsula, or even in the interior parts of India, any single caste, or dress, or custom, or form of superstition, or anything else belonging peculiarly to Eastern manners, which we may not witness at Bombay in as genuine and apparently unsophisticated a condition as on the spot to which it properly belongs. In twenty minutes' walk through the bazaar of Bombay we



[Photo D N Thomas]
CHINESE WOMEN SELLING PAPER
DESIGNS, BOMBAY

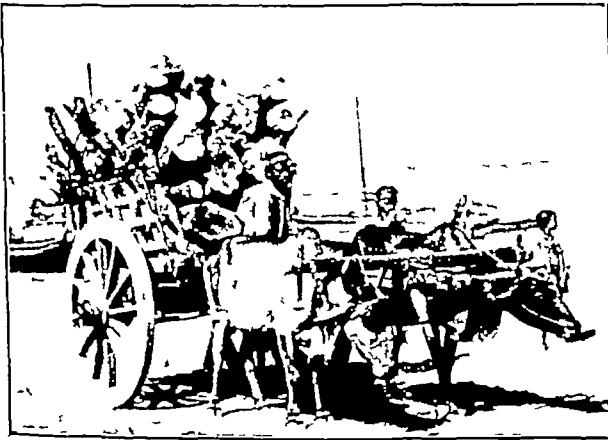
ear has been struck by the sounds of every language that I have heard in any other part of the world, uttered not in corners and by chance, as it were, but in a tone and manner which implied that the speakers felt quite at home. In the same short space of time I have counted several dozens of temples, pagodas, joss-houses, and churches, and have beheld the Parsis, the linear religious descendants of Zoroaster, the Hindus with equal earnestness, bowing their heads to Brahms in the shape of a well-oiled black stone, covered with chaplets of flowers and patches of rice, while in the next street Mahomedan ceremonies of the grand Moharam were in full display, and in the midst of all a Portuguese procession bearing an immense cross, and other Roman Catholic emblems, as large as life."

Education

Until the dawn of the nineteenth century the English rulers of India did not appear to have devoted any thought to the question of education of the people, steeped though they were in ignorance and superstition. Perhaps the struggle for

existence and acquisition of territories and the problems of consolidation of conquered territories and formation of systems of administration suitable to the conditions obtaining in the country left them very little time for the humanising duties of the State. The early history of education in Bombay is, therefore, mainly a record of efforts of indigenous schools and seminaries conducted by Christian missionaries.

The teachers of indigenous schools held their classes in the verandahs of houses, children squatted on the floor, slates and pencils were as great novelties as chairs and tables. A small portable wooden board did duty for slate, and on this the pupil traced letters of the alphabet and numerals with a reed pen dipped in chalky fluid. According to the *Bombay City Gazetteer*, "the Mehetaji (school master) exercised unlimited power within his own domain. Not only did he oblige his elder pupils to sweep the school premises every morning, but in cases of mis-



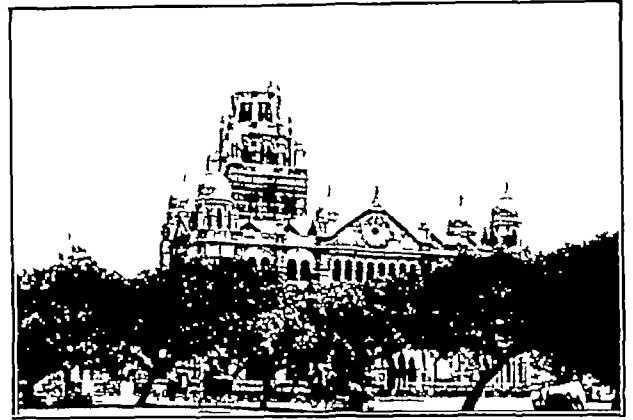
[Photo Clifton and Co

CARTING FIREWOOD, BOMBAY

behaviour he subjected the boys to several most ingenious modes of punishment, such as standing in a bent position for an hour with their fingers touching their toes.

The arrival of a new pupil was the occasion of a regular initiation ceremony, in which the Mehetaji, after having been garlanded at the house of the boy's parents, headed a procession back to the school, amid the chanting of hymns to Ganesh, the god of knowledge. This was followed by the distribution of inkstands and sweetmeats to the pupils, who observed the remainder of the day as a holiday. In these indigenous schools only the rudimentary instruction in the vernaculars was given. During the Portuguese regime the Franciscan fathers maintained several seminaries attached to churches for catechism and elementary instruction in agriculture and other industrial work. Colleges for higher education were also established by the Portuguese in several important centres, such as Bassein and Thana, one of which stood on the verge of the Malim coconut woods in Bombay.

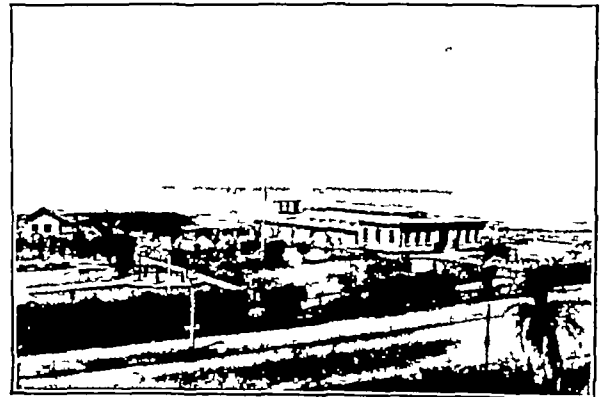
On the expulsion of the Portuguese by the Mahrattas in 1739 and the suppression of the Catholic orders, these seminaries and orphanages were broken up. Only the parish schools survived and were carried on by the clergy with the aid of private subscriptions. After the cession of



[Photo Clifton and Co

B. B. & C. I. RAILWAY ADMINISTRATION OFFICES, BOMBAY

the island to the English, a charity school was opened by the Reverend Richard Cobbe, chaplain of St. Thomas' Church, for "educating poor (European) children in the Christian religion, according to the use of the Church of England." Not a single school was established by Government for the education of the children of the inhabitants of the island. However, missionary workers soon came forward to supply this want, the pioneers in the field being the American Mahratta Mission, who arrived in Bombay in 1813 and opened in 1815 a Hindu boys' school—the



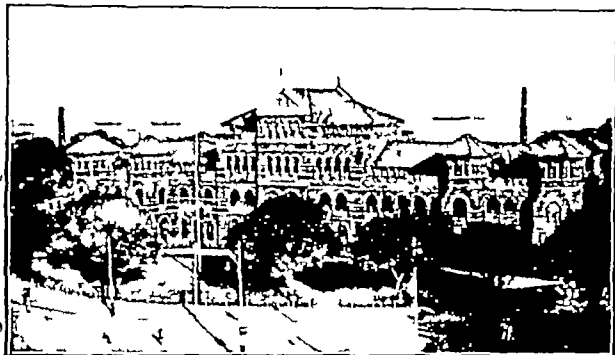
[Photo Clifton and Co

BREACH CANDY BATHS, BOMBAY

first school conducted on modern lines in this part of India. In the same year was founded the Bombay Education Society. It did not confine its efforts to the education of European children. Indian boys were encouraged to attend schools. The Church Missionary Society and the Scottish Missionary Society soon followed, and the schools maintained by them imparted an impetus to the general movement for the education of the masses,

which gave rise to aspirations for higher education

In 1827, when the popular Governor of Bombay, Mountstuart Elphinstone, relinquished the reins of office, the princes and people of India raised large sums of money for perpetuating his memory by the foundation of professorships for the higher education of the youth of the country. This was the origin of the Elphinstone Institution, which was placed under the control of a Board of Education. This Board shared with the missionaries



[Photo Clifton and Co

HIGH COURT, BOMBAY.

from Europe and America the entire burden of education in the city down to the year 1855, when the Directors of the East India Company at last realised that one of their most sacred duties was the supply of the means, as far as in them lay, of "conferring upon the natives of India those vast moral and material blessings which flow from the general diffusion of useful knowledge and which India may, under Providence, derive from her connection with England." For the attainment of this object they constituted a Department of Public Instruction. It controlled primary education in Bombay till the formation in the year 1888 of Joint Schools Committee, composed of representatives of Government and of the Municipal Corporation of Bombay. The joint representation was done away with in 1897, so that now the Schools Committee of Bombay is a purely municipal body.

The Board of Education had prepared the way for a University, which was established in 1857. The University senate consists of the Chancellor, who is the Governor of Bombay for the time being, the Vice-Chancellor, who is appointed periodically by the Governor-in-Council from among the Fellows. The entrance to the University is by the matriculation examination, which is open to candidates from schools recognised by the University. After matriculation none can present himself for any University examination unless he has gone through a prescribed course of study at a college affiliated to the University. Affiliation and recognition are accorded by Government acting on reports and information received by them from the senate.

The most important educational institutions are the Elphinstone College, conducted by the Educa-

tional Department of Government, St Xavier's College, maintained by the members of the Society of Jesus, and Wilson College, supported by the Scottish Mission. These are all arts colleges. Government also maintains the Sydenham College of Commerce, the Grant Medical College, and a Government Law School. It likewise maintains the Poona Agricultural College and the College of Science, Poona, which are largely resorted to by students from Bombay who desire to qualify themselves for the degrees in agriculture and civil engineering. Many a commission has been appointed and many a reform introduced to improve the system of education, but while remarkable progress has been made in the sphere of higher education, the bulk of the population is still illiterate. Female education is still in its initial stage. There is no doubt that Government has so far adopted a parsimonious policy in this respect. The principle of free and compulsory education has only just been accepted, and its application will take many years.

Climate

The climate of Bombay is fairly equable. There are marked differences in temperature about sun

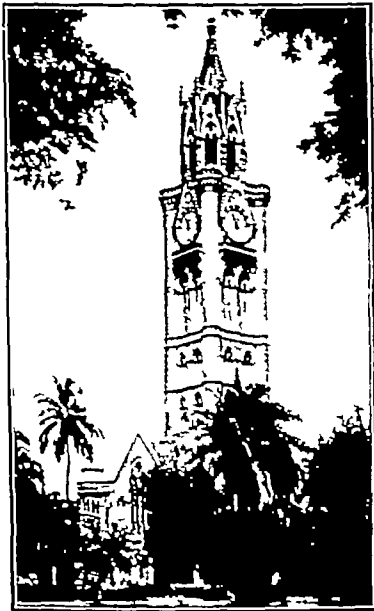


[Photo Clifton and Co

QUEEN VICTORIA STATUE, BOMBAY

rise and sunset, but the changes known as the "variability" of temperature are insignificant. The extreme effects of temperature are tempered by the sea-breezes continuously blowing over the island and the presence of large quantities of aqueous vapour in the atmosphere. The proximity of the sea, however, renders the climate relaxing. Even during the winter months, when comparatively cold and dry winds blow over the land, it is more relaxing than invigorating. The division of the year into seasons is twofold—the dry and the wet season, according to the prevalence of the north-east and south-west mon-

from October to April and May to September respectively. The south-west monsoon bursts between the 1st and the 15th of June, accompanied by storms of some violence. These disturbances, especially those which in June and October mark the incoming and receding currents, are known as the *Elephantas*. This name was originally given by the Portuguese to violent storms occurring at the end of the monsoon, taking the name from *hathaya*, the 13th lunar asterism, connected with *Hathi*, an elephant. For several days preceding these storms, generally during the afternoon, the eastern and south-eastern skies become lurid with thunder clouds. As night approaches, the clouds keep up fitful discharges of lightning, which increase in intensity and nearness, until after a few days such conditions are determined as culminate in a storm. There is usually a light wind in the beginning, and the lower strata of the air become highly saturated with moisture. The depth of this disturbance is comparatively great, and the vertical temperature gradient becomes very steep throughout this zone of disturbance. The atmosphere becomes thoroughly unstable. There is a violent rush upwards of heated air fully saturated with moisture, which, as it ascends, displaces the



[Photo Times of India]

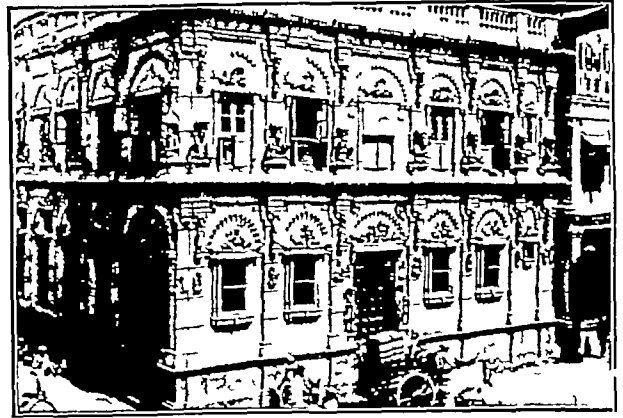
RAJABAI TOWER, 280 feet high, BOMBAY.

The clock on this tower is fitted with a sweetly-chiming peal of sixteen bells. These play sixteen different tunes which change automatically four times a day.

cooler and drier air above. When this interchange takes place through a sufficient depth to carry a large quantity of the lower surface air to a definite height where the prevailing temperature is below dew-point, sudden condensation occurs. The resulting rain and evaporation cool the central portion of the disturbed area, and the conditions there are suddenly reversed. The air in the central regions now being denser descends, while everywhere else around the area the currents are ascending as before. The advent of the storm is for this

reason heralded by a small rise of the barometer and of temperature. The wind now increasing rapidly in strength, comes with a rolling motion downwards and outwards, and the storm bursts in earnest over Bombay, bringing with it heavy showers of rain.

The mean annual temperature is $79^{\circ} 6$. The coldest month in the year is January with a temperature of $73^{\circ} 9$, while May is the warmest with a mean temperature of $84^{\circ} 7$. During the hot



[Photo Chifton and Co]

HINDU MONKEY TEMPLE, BOMBAY

days of April and May, until the south-west monsoon bursts in June, boils and prickly heat trouble many. The monsoon is a healthy season, but in August malaria becomes prevalent, and lasts until October. The period during November to February is the healthiest of the year.

On the whole Bombay is not an unhealthy city. The periodical epidemics, such as smallpox, cholera, and influenza have become rarer, and the mortality is about thirty per thousand, a figure which compares very favourably with other tropical countries. This is due to great improvements made during the British occupation. Before that the climatic conditions of the island were so deadly that in 1689, when the Rev John Onington arrived in Bombay, the island seemed to him to be "no more than a parish graveyard." Of the twenty-two soldiers who sailed with him, twenty died before the rains ceased, and of the ship's company fifteen. No wonder he wrote "As the ancients gave the epithet of fortunate to some islands in the West, because of their delightfulness and health, so the moderns may, in opposition to them, denominate Bombay the unfortunate one in the East, because of the antipathy it bears to these two qualities."

The causes of such unhealthiness have been gradually removed and to-day, barring certain insanitary areas, Bombay again bids fair to be a *ilha da boa vida* (the island of good life).

Cotton Industry

Herodotus is believed to be the first writer who refers to cotton. "They possess a plant," he says while writing of India, "which instead of fruit produces wool of a finer and better quality."

than that of sheep, of this Indians make their clothes", and when Alexander had become master of Persia and descended the Indus to the sea, his Admiral reported that there were in India trees bearing, as it were, flocks or bunches of wool, and that the natives made of this wool garments of surpassing whiteness, or else their black complexions made the material whiter than any other. But the history of cotton spinning and weaving in India goes farther back to the mists of remote antiquity. Indian mythology speaks of gods and goddesses who wore woven garments, and considering the climate of the country, it may be surmised that the stuff used for the clothing was cotton.

Fact and fable are intertwined in the story of the cotton plant. "At a very remote period the cotton plant or tree grew in the country then known as Scythia, or Tartary, and the inhabitants used the fleecy fibres to weave the materials for clothing. The knowledge of this remarkable vegetable production spread to regions where the plant was not known, and as the story travelled it gathered the fiction of a lamb that grew on a tree. The lamb had fleece, from which Eastern people wove their clothing. One version stated that when the seed pods burst open there appeared little lambs covered with fleecy cotton, while another version stated that a genuine flesh and blood lamb grew on the top of a short stem, which was flexible enough to allow the animal to feed on the grass within its reach." Sir John Mandville carried this tale to England in the fourteenth century on his return from his Eastern travels. He said he had not only seen but had eaten of the animal. "From that land men go towards the land of Becheria," he added, "where are very civil and cruel people. In that land are trees that bear wool, as though it were of sheep, whereof man makes clothes and all things that are made of wool. In that country and many others beyond and also in many on this side men sow the seeds of cotton."

When Columbus set out in 1492 to find a sea passage to India he discovered in one of the Bahama Islands that cotton yarn was made and offered in barter. At Cuba he found the people clothed in cotton, and in Mexico, Pizarro, and Cortez, the inhabitants were likewise garmented in cotton, having neither flax, silk, nor wool.

From the remotest times India has acquired the reputation for her cotton goods, which constituted one of her oldest exports. When Egypt built her pyramids and Khalifa Harun-Al-Rashid went his nocturnal rounds in Bagdad, the Dacca weavers were busy making their beautiful muslins, renowned throughout the world for their fineness. One of the ways of testing their fineness was to pass a whole piece, 20 yards in length and 1 yard in width, through the small aperture of an ordinary sized finger ring.

When the East India Company commenced their career of commerce in India, little dreaming that traders by design they were going to be rulers by

accident, cotton goods formed the principal item of their business. A letter from the Surat factor to Bombay, dated November 4, 1676, throws interesting light on this question so far as it concerns Bombay.

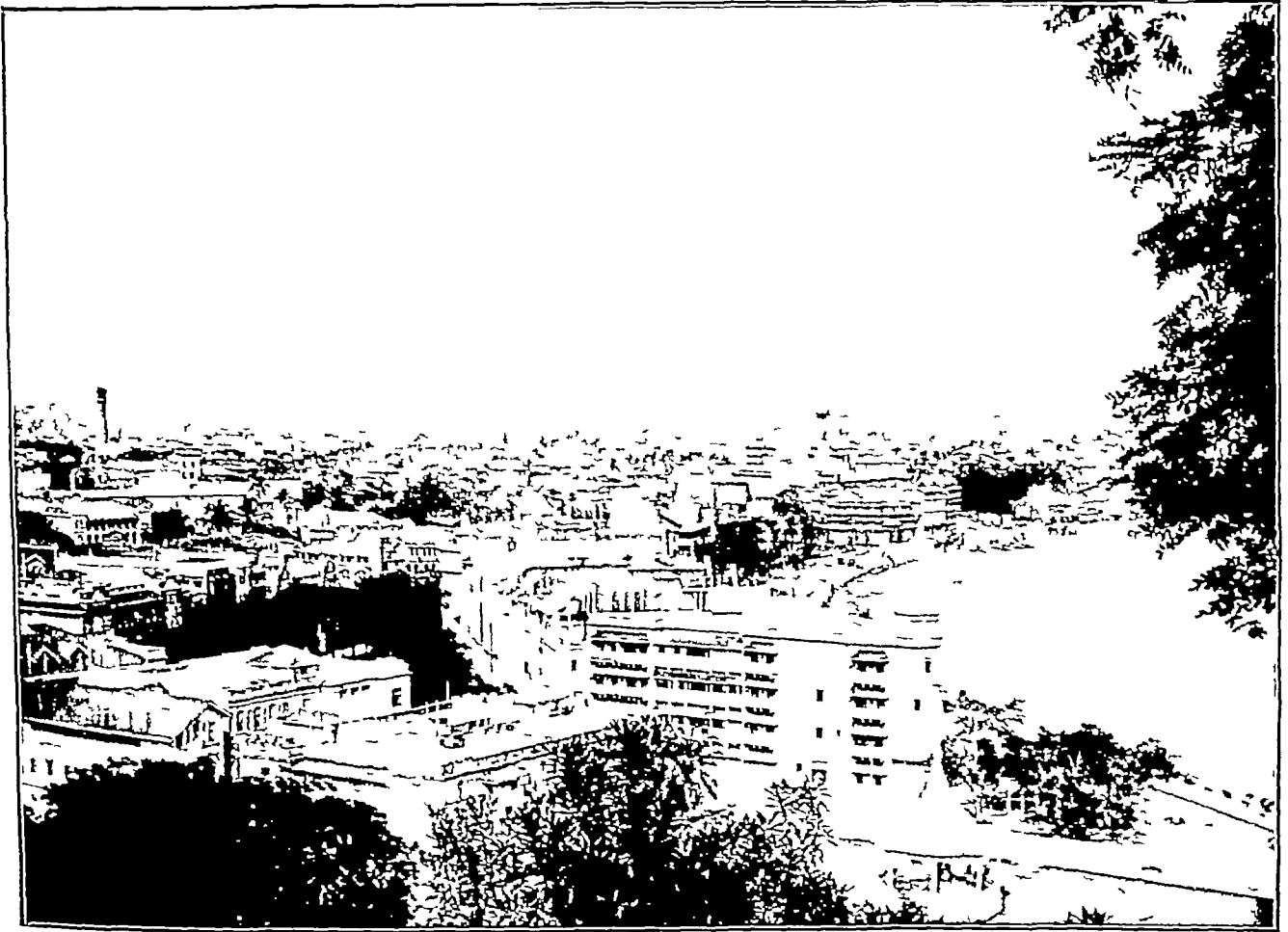
"We are assured if you and your brokers there would be as industrious as you ought in inviting and encouraging weavers to settle with you, that manufacture of calicoes would be increased much more than it is. We desire you, therefore, seriously and earnestly to take this affair into your consideration, and to use all just means possible to invite and encourage weavers of all sorts to inhabit on the island. We give you notice that it is the Company's particular directions to us to procure as many *dungri* weavers to settle on the island as we can in regard to the commodity in request, to whom also we would have you procured as many *pantka* weavers as you can, for they will also be necessary. For your better supply of cotton yarn for the keeping the said weavers at work we shall send you down by the *Hough* a considerable portion of Rajapur yarn, which will be with you in a few days after receipt of this letter, whereof what is proper to be delivered out to the weavers for the making of any sort of calicoes fit for Europe we would have you so disposed of and the remainder be sold to the Company's best advantage."

Thus by the end of the seventeenth century a regular hand industry had been established. The Company imported silk and cotton, which they distributed to the weavers, who were paid partly in cash and partly in rice. The Bombay stuffs having earned much repute, the Council at Surat was directed in 1735 by the Company to persuade weavers from Gujarat to settle in Bombay. Advances of money were made to them, and houses were specially built for them. Bassein weavers were also induced to migrate to Bombay in 1738 for the manufacture of goods suited to the market of Jeddah and other ports. Thus increased leaps and bounds the exports of cotton manufactures from India. The business, however, sustained a set-back in the middle of the eighteenth century when England began the manufacture of her own cloth. With the use of machinery she threw India absolutely in the background, and the export of cotton manufactures from India to England began to decline. In the year 1813 the monopoly of the East India Company was broken and the ports of India were thrown open to English merchants. By this time India's exports had become quite insignificant, nevertheless protective duties of 70 and 80 per cent were imposed in Great Britain on cotton and silk manufactures from India, and the export of some kinds of goods was absolutely prohibited. Necessary as this measure was considered to give a start to the textile industry in England, it practically extinguished India's exports in these lines. English piece goods and yarn now began to flood the Indian markets, and Lancashire practically monopolised the supply for more than half a century. B. I. C.

enormous imports of these goods gave the Indian mercantile community the impetus to start its own mill industry

The idea of starting a cotton-spinning factory in Bombay originated in 1851 with a Parsi merchant, Cawasji Nanabhoy Daver. He corresponded with Platt Brothers and Co., of Oldham, who were only too pleased to encourage the project, and to offer advice and suggestions concerning the machinery required for spinning Indian cotton

The progress in mill building for the first decade was rapid. But with the outbreak of the Civil War in America in 1861, the consequent abnormal demand for Indian cotton and the fabulous prices it fetched in the British markets, a saturnalia of speculation set in. Merchants, bankers, brokers, traders, invested their money or speculated in cotton. The value of cotton exports, estimated in 1860 at 5½ millions, rose to 80 millions during the five years of the American War. The



[Photo Times of India]

BOMBAY FROM THE HANGING GARDENS

Plans and estimates were prepared for a mill of 20,000 spindles, and on February 22, 1854, there was formed and inaugurated the Bombay Spinning and Weaving Company, which opened its mill—the first in India—in 1858. Within three years the tall chimneys of half a dozen more factories towered above the surrounding buildings in the city. Thus Bombay, which had long been the Liverpool of the East, now became or promised to be the Manchester as well.

From this period the foundations of the prosperity of the city as a centre of trade and industry were laid, and its subsequent growth and advancement has been largely due to the enterprise of the pioneers of the cotton industry, who were mostly Parsis.

city was the richer for it by 75 millions sterling, and embarked on various projects for the formation of banking and financing associations, press, and shipping companies. Of these the most notorious was the Back Bay Reclamation scheme. The public went crazy over it and paid Rs 25,000 for a share of the nominal value of Rs 4,000. But with the cessation of the American War came the crash. The price of Indian cotton fell with amazing rapidity, bringing with it a slump in the prices of other securities and the failure and insolvency of individuals and institutions who were rolling in wealth during the giddy days of the share mania. But within a few years conditions were stabilised, so that between 1870 and 1875 nearly 15 additional cotton factories were started. This rate of progress was maintained until the year 1895 when

there were 70 mills in Bombay. Since then, however, the progress has been slow, partly owing to the prevalence of plague in the city and partly owing to the competition with Japan, who had commenced building her own mills and had become a formidable rival in the Chinese markets. With the outbreak of the World War in 1914 there was a cessation of shipments of machinery from Lancashire to India. This put a complete stop to mill building in Bombay. Only one new mill was erected between 1915 and 1925, but large extensions were made during the period, and the num-



GREAT WESTERN BUILDING, BOMBAY

ber of spindles and looms substantially increased. The early post-war conditions were most favourable to the Bombay mills. Record profits were made which reached their zenith in 1921. From that time reaction set in, and to-day the mill-owners are having an anxious time.

Sweet, however, are the uses of adversity. The decline in profits compelled the mill-owners to spin higher counts and weave a greater variety of cloth and to improve generally the production of their mills. The old concerns that had been working at a disadvantage for want of weaving and other machinery were renovated with looms and finishing plants and other modern improvements and processes, and the new mills were equipped with the most up-to-date machinery. To-day therefore, the Bombay cotton mills can stand comparison in their general equipment and manufacturing resources with their Lancashire contemporaries. The same cannot, however, be said of labour or management. A good deal remains to be done for the improvement of labour, which is notoriously inefficient.

The Harbour.

"I see the best port Your Majesty possesses. India, with which that of Lisbon is not to be compared, treated as of little value by the Portuguese themselves."

This was the pathetic plaint of the Viceroy of Goa, Antonio de Mello de Castro, to the King of Portugal, D. Afonso VI. On him devolved the unpleasant duty of handing over possession of the Island of Bombay to the English in pursuance of the compact of marriage between King Charles II and Infanta Catherine of Portugal, and he tried every device to put off the transfer. However, he had to yield at last to the peremptory orders of the King. "I confess at the feet of Your Majesty," he observed, "that only the obedience I owe Your Majesty as a vassal could have forced me to this deed, because I foresee the great troubles that from this neighbourhood will result to the Portuguese." Then came the prophetic warning: "India will be lost on the same day on which the English nation is settled in Bombay."

From the earliest times when the Phœnician sailors and Babylonian traders, the Arab pirates, and the Chinese merchants, anchored in the neighbourhood of the Silahara capital, the capacity and safety of the harbour have impressed the sea-rovers of all nations most favourably. So open, so spacious, and at the same time so secure, is the bay, so smooth is the water, and such a fine sea-breeze blows during the greater part of the day, that the smallest boats ply in it with safety. Being easy of access and egress, affording excellent anchoring ground and admirably adapted for docks of every description, the harbour possesses every desideratum of a great seaport. Its earliest description is that given by Antonio Bocarro, Records-keeper of India and Chronicler in 1611. Under the heading "Description of the Bar and Port of Mombaim," he described the port as follows:

"Mombaim is a broader and deeper river than any in this State of His Majesty. It lies eight leagues to the south of Bassein and to the north of Chaul. This river is of salt-water, through which many rivers and creeks from that region disembogue into the sea. There are no sand-banks, shoals, or shallows, except a rocky ridge which juts out from the land-point southwards, and extends half a league to the sea. It is visible under rocks, and though slightly visible where it begins on land, it soon conceals itself under water and runs shallow for half a league, so that if a vessel fails to take heed is sure to run aground. This river of Mombaim is two leagues wide at the entrance, but soon narrows itself inward, though not much. Coming from without across the bar one must steer north-eastwards, keep clear of the seaside from the islet named *Crado*, and sail at the depth of eight fathoms through the middle of the canal."

"A fine large port where one can be safe from all winds," was the description of the harbour in 1666 by the Dutch traveller Baldoen.

French traveller Dellon, who followed him, also praised it as "one of the safest in the world, provided you are well acquainted with the situation of the place to avoid the rocks", and Fryer, in 1675, described it as "a vast indented circumference which is able to contain a thousand of the vast ships of Europe in safe harbour from wind and weather"

"The harbour is one of the finest in the world," wrote Forbes about the year 1770, "accessible at all seasons and affording a safe anchorage during the tempestuous monsoons. The merchants carry on a trade with all principal seaports and interior cities of the Peninsula of India, and extend their commerce to the Persian and Arabian Gulfs, the coast of Africa, Malacca, China, and the Eastern Islands"

The harbour is a deep arm of the sea between the Island of Bombay and the mainland about 12 miles long, from 4 to 6 miles wide, and covers an area of about 70 square miles. The bottom generally consists of mud. The general depth varies from $3\frac{1}{2}$ to 6 fathoms. The mean range of tide is 13.9 feet. The harbour contains several islands, rocks, and shoals, and its shores are indented by numerous bays and islets. Southward lies Kenery Island to the opposite point of the mainland, to the west also extends Kenery Island to the floating light, and thence to Malabar Point, to northward is Hog Island to Trombay village, and from the south-west point of Trombay Island to Sewri Fort, and to the east is situated Nocar Point across the entrance of the Amba River to the entrance south of Karanja Island, and from the northern point of Karanja Island to the north-west point of Hog Island. The port is under the control of the Port Trustees, and the management of the port, pilotage, and docks is vested in a Port officer, under whom there are several dock-masters, harbour-masters, master pilots, and licensed pilots.

Two formidable creeks run inland from the harbour. The Dharamtar Creek extends from Kansa Islet eastward for $3\frac{1}{2}$ miles, and affords good anchorage for small ships at its mouth. The Thank Creek opens into the northern part of the harbour, and runs for ten miles from the village of Trombay to Thana town. It has a width of a mile and a half, which gradually narrows as Thana is approached. At the entrance to the Dharamtar Creek lies Kansa, or Gull Islet. The other islands with which the harbour is studded are Karanja Island, consisting of two hills and an intervening valley, Cross or Gibbet Island, situated nearly opposite the Victoria Dock, on the eastern side of a reef of rocks, with shoals extending north and south of it, Butcher's Island, situated three miles north-east of Cross Island, and containing barracks, store-houses, and a cemetery, Elephanta Island, which lies one mile east of Butcher's Island and consists of two hills, and Hog Island lying three-quarters of a mile east of Elephanta. Outside the harbour, but within the port limits, lie the islands of Henery and Kenery.

The principal reefs of the harbour are The Karanja Reef, extending two miles west of Karanja Island, the Cola Reef, opposite the Victoria Bunder, the Cross Island Reef, which lies immediately north of the South Channel beacon, opposite the Victoria Terminus of the Great Indian Peninsula Railway, and the Butcher Big Reef, separated from the Butcher's Island by a narrow channel.

Among the chief shoals may be mentioned the Colaba Shoal, extending from opposite the Prong's Reef for three miles along the east side of Colaba, the Middle Ground Shoal, which lies north-east of the Dolphin Rock and two miles from the Sunk Rock, and has near its centre a rocky islet, about



[Photo "Times of India"]

ESPLANADE ROAD, BOMBAY.

40 ft high, surmounted by a battery, the Flagstaff Shoal, nearly opposite the Custom House and north-west of the Middle Ground Shoal, and the Elephanta Spit, a shoal of mud running in a north-easterly direction from the north end of the Elephanta Island.

The chief rocks which arrest the attention of the navigator in these waters are the Sunk Rock, on which a lighthouse stands, situated to the south-east of Colaba Point, and divided by a narrow channel from the Colaba Shoal, Oyster Rock, surmounted by a battery, lying nearly opposite to Pilot Bunder, about half a mile from the shore, Nigger's Head Rock, lying south-west of the Oyster Rock and covered by one foot of water, the Dolphin Rock, a small rocky shoal carrying a lighthouse, partly visible at low water, and lying a mile and a half north-east of the Sunk Rock, the Apollo Spit, or Falkland Rock, lying just off the southern extremity of that island, the Bamade Rock, on the west side of the channel dividing Elephanta and Hog Islands, and marked by a black pillar thirty feet high, and the Violet Shelf, a rocky patch close to the foreshore on the north of Prince's Dock.

to 26 feet, and Alexandra Dock, 49½ acres, for vessels drawing up to 36 feet. There are two dry docks, the Mereweather Dock, 500 by 65 by 25½ feet, and the Hughes Dock, 1,000 by 100 by 34½ feet.

The equipment consists of one hydraulic crane of 100 tons lifting capacity, one of 30 tons, one of 5 tons, eight 6 tons, eighty-four 35 cwts., one hundred and twelve 30 cwts., one 60-ton floating crane, 85 hoists, and several runabout cranes.



SAILING CRAFT AT MALET BUNDER, BOMBAY.

There is also a specially equipped barge for the reception of oil waste and bilge water, likewise a dredging fleet of 9 large modern dredgers, 9 steam hopper barges, and a rock breaker.

The docks are connected by railway with the G I P and B B and C I systems, while the terminal passenger station on Ballard Pier (1,500 feet long) is in direct communication with all the railways in India. The Port Trust Railway effects these connections through a large Interchange Yard at Wadala, over 100 miles of track having been laid down, and the railway handles nearly 50 per cent of the terminal goods traffic of Bombay. The pier is used by the largest vessels to embark and disembark passengers and mails, and its facilities for baggage, Customs examination, refreshments, etc., are generally acknowledged to be unsurpassed by any large port.

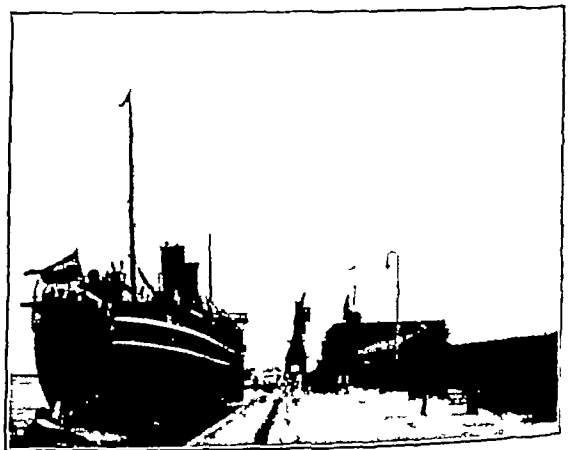
The principal schemes completed during the past twenty years include (1) Alexandra (wet) and Hughes (dry) Docks, (2) Port Trust Railway and Ballard Pier Station, (3) Mazagon Sewri Reclamation Works, involving 583 acres of reclaimed land to provide goods depôts. The Sewri and Wadala reclamations accommodate the railway Interchange Yard, Antop model village for employees, the bulk-oil installations, depôts for cotton, grain, manganese ore, etc., and other industrial works, (4) a deep-water pier at Trombay for the discharge of bulk petrol and kerosine oil, with several miles of connecting pipe-line to the oil installations at Sewri. Oil bunkering can also

be carried out at most berths in the Alexandra Dock and at the Harbour Walls.

The completion of the first three schemes just before the outbreak of the Great War enabled Bombay to be successfully utilised as the chief base port in India.

The Ballard Estate, on reclaimed ground south of Alexandra Dock, has been developed as a first class business area.

The transit sheds and warehouses cover 3,200,000 square feet, providing ample accommodation for goods in transit. A new three storied transit shed, 400 feet long by 120 feet wide, with a floor area of 140,000 square feet, has just been completed at No 9 berth, Alexandra Dock. The cotton depôt is probably the largest in the world, providing covered accommodation for one million bales and uncovered accommodation for another million. The total area is 432,500 square yards and the depôt is fully equipped with reception and loading stations, roads, godowns, offices, fire and salvage service.



ROYAL MAIL STEAMER "MALOJA," 20,008 TONS, BERTHING AT BALLARD PIER, BOMBAY

Gross Receipts of the Trust in Lakhs	
1917-18	Rs 178 30
1918-19	Rs 192 62
1920-21	Rs 222 97
1921-22	Rs 217 17
1922-23	Rs 259 62
1923-24	Rs 260 71
1924-25	Rs 273 76
1925-26	Rs 284 13
1926-27	Rs 264 02

The principal imports handled at the port are piece-goods, metals, sugar, machinery, rice, oil, glassware, motor cars, oilmen's stores, paper and hardware, the chief exports being cotton, piece goods, grain and seeds, ground-nuts, mung-bolams, twist and yarn, oil cakes, wool and manganese ore.

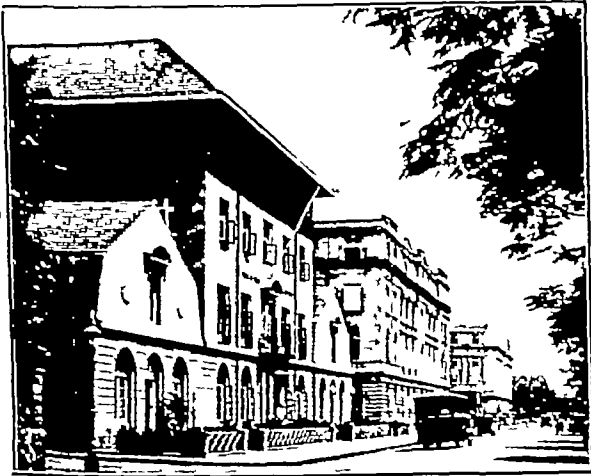
BUILDINGS AND PLACES OF INTEREST.

The Mole and Alexandra Dock

To the visitor from the West landing at Bombay the mole and the entire surroundings give the impression of a modern European city. The fine pier and the neighbouring Alexandra Dock were constructed just before the Great War. Where there was a rocky and shallow strip of the sea there is now a large modern building for the convenience of passengers. On the ground floor are the waiting rooms, postal and Customs sheds, a hall for medical inspection, etc., on the upper floor are waiting and refreshment rooms and bars.

Apollo Bunder

Before the Ballard Pier was constructed the small steamers had to go straight to the Prince's and Victoria Docks, situated farther north, large steamers had to anchor in the stream, and passengers had to disembark by means of steam launches, as steamers could not then come along-



[Photo 'Times of India']

**NEW SAILORS' HOME,
BALLARD ESTATE, BOMBAY**

side the mole as they do now. But even in those days the tourist landing at the Apollo Bunder saw sights which reminded him of his own land—the stately pavilion, the imposing edifice of the Taj Mahal Hotel in front, and the stately pile of the Yacht Club chambers on the right, all connoting Western life.

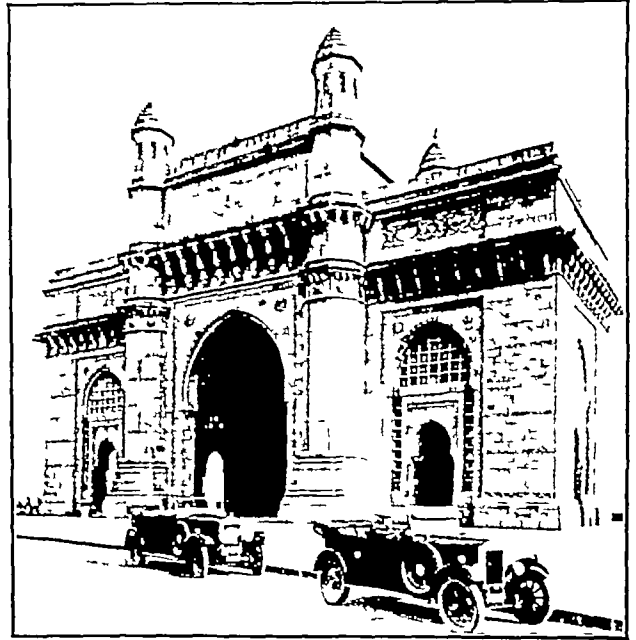
Royal Bombay Yacht Club

This club is the favourite resort of the European community in Bombay. Their Majesties King George and Queen Mary visited it on the occasion of their tour in India in 1905, as is testified by their signed portraits hanging over the main staircase. The building was formally opened on November 1, 1881, and permission was obtained from the Lords of the Admiralty to fly the Blue Ensign of the fleet over the club premises and the yachts belonging to the club. Since then con-

siderable extensions have been made, the most notable being the handsome block of residential chambers on the south side of the Apollo Bunder Road.

The Gateway of India

On the Apollo Bunder stands the handsome and imposing "Gateway of India," erected in com-



[Photo 'Times of India']

"GATEWAY OF INDIA," BOMBAY.

memoration of the visit of Their Majesties King George and Queen Mary on November 2, 1911. Its central portal gives admittance on both sides into a hall paved with black and white marble. The site was and still is the landing place for all celebrities. It was here that King Edward VII landed in 1875 when he was Prince of Wales; here also all the members of the Royal Family who subsequently visited the city, and the Viceroys and Governors deputed by the Crown, first set their feet on Indian soil.

Sailors' Home

Following Apollo Bunder Road in a westerly direction, we come to the Royal Alfred Sailors' Home, which was first instituted at Babula Tank on June 15, 1837, when the monsoon caused great destruction to the shipping. About a thousand seamen who had sustained injuries in the storm were taken to the Home. Not long afterwards it was transferred to a building in Dhobi Talao, and thence to the present castle-like edifice, which was commenced on February 28, 1872, and completed on February 29, 1876. The dormitories are large and well ventilated, there is a reading room and library, and also a bar where wholesome liquor at moderate cost is provided. The style of the building is Gothic, and on the top of it are a sculptured figure of Neptune, a tower and flagstaff.

Prince of Wales Museum and Statue

Right across is the Crescent site, on which now stands the Prince of Wales Museum, an imposing building in the Indo-Saracenic style, which was erected in commemoration of the visit of King George V as Prince of Wales in 1905. In front of it stands the handsome equestrian statue of King Edward VII, called the Prince of Wales



[Photo Clifton and Co

STATUE OF KING EDWARD VII,
ELPHINSTONE COLLEGE AND
SASSOON LIBRARY.

Statue, which is familiarly known as "Kala Gora" (Black Horse). It was a gift to the city from Sir Albert Sassoon, and is a fine specimen of Sir Edgar Boehm's work.

On the right is situated the Elphinstone College, and on what was once its playground now stands the edifice of the College of Science and the Cowasji Jehangir Hall, the most convenient place for public meetings and social functions and concerts. It was presented to the city by Sir Cowasji Jehangir, Bart.

Admiralty House

The earliest reference to an Admiralty House was made in 1754 by Edward Ives in his *Voyage from England to India in 1754*. "The Admiral's family resided at the Tank House (so called because of a large tank or pond near to it), and here, as well as at all their other settlements, the Company allowed the Admiral and his principal attendant palanquins, over and above the five pagodas a day which were given him to defray part of the expenses of his table." That house was probably built as Government House, and was situated to the east of Bombay Green and to the north of the Honourable Company's Bunder. In 1761 Admiral Cornish declined to live in it, as it was "so full of vermin as to be scarcely habitable." A new house was therefore rented, and the Admiralty House was removed from place to place until the year 1905, when the existing building facing the south end of Cooperage, at the corner

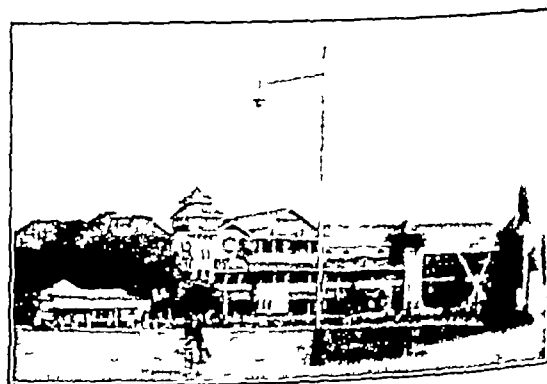
of Wodehouse Road, was constructed. The Cooperage recreation ground is in front, and beyond it is the Oval, another recreation ground for the public.

The Secretariat

Facing the Oval stands the Secretariat. In it are located the offices of most of the departments of the Government of Bombay. The building which is in the Venetian Gothic style, overlooks a small garden. During the 17th century and up to the year 1758 the Secretariat occupied a few rooms in Bombay Castle. The demolition of the Fort House in that year set the Secretariat on the move. After it had occupied several places temporarily it was transferred in 1874 to the present building, which was planned by Colonel Wilkins, R.E., and is in the Venetian Gothic style. The location of the various offices is shown upon a board in the entrance hall. The Council Hall, Library, and Committee Rooms occupy a portion of the first floor.

University Buildings

Lying between the Secretariat and the High Court are the University Buildings of a florid and decorative 13th century French-Gothic type. Designed by Sir Gilbert Scott and completed in 1874 they consist of two detached buildings, namely the Senate House, or Sir Cowasji Jehangir Hall, and the University Library and Clock Tower. The Sir Cowasji Jehangir Hall measures 150 feet long by 65 feet wide, and has a high-pitched gable roof.



ROYAL BOMBAY YACHT CLUB

about 90 feet in height, with four square turrets at the angles. The chief apartment is 104 feet long by 44 feet broad and 63 feet high, furnished at one end with semi-circular apse containing raised seats, and surmounted by a gallery supported by ornamental iron brackets and approached by staircases in the angle-turrets. The gable is embellished with a circular window, 20 feet in diameter, having its outer ring of twelve large filled with stained glass representations of the twelve signs of the Zodiac. Over the window on the western wall are stained-glass representations

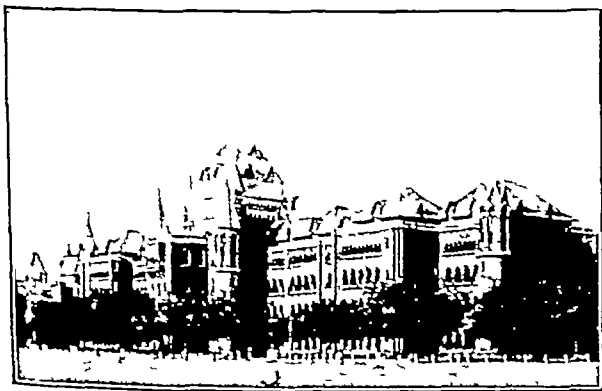
of Sir Cowasji Jehangir's escutcheon and of the arms of England, Scotland, Ireland, Wales, and Bombay. The eastern windows bear the arms of former Chancellors of the University, viz., Lord Elphinstone, Sir George Clerk, Sir Bartle Frere, Sir Seymour Fitzgerald, and Sir Philip Wodehouse.

The Library building comprises two floors. Above the porch rises the Rajabai Clock Tower to a height of 280 feet, with five richly-decorated storeys. The top of the cupola is ornamented with 16 statues, and about 30 feet from the ground there are 8 other statues representing various Indian castes. The fifth storey contains the clock-dials. The clock is fitted with sweetly chiming machinery playing sixteen tunes, which change automatically. Several busts adorn the Library, and around the buildings is a garden, graced by the statues of Sir Cowasji Jehangir and Thomas Ormiston.

The University was founded seventy years ago. It has several faculties, but it is not a teaching body. It merely holds examinations and confers degrees on candidates trained in colleges affiliated to it.

High Court

As imposing as the Secretariat the stately pile of the High Court is in the early English-Gothic style. Here justice is dispensed by six judges, mostly Indians. In 1670 the administration was in the hands of justices who held their sittings in the Custom Houses of Bombay and Mahim. In 1675,



[Photo Clifton and Co

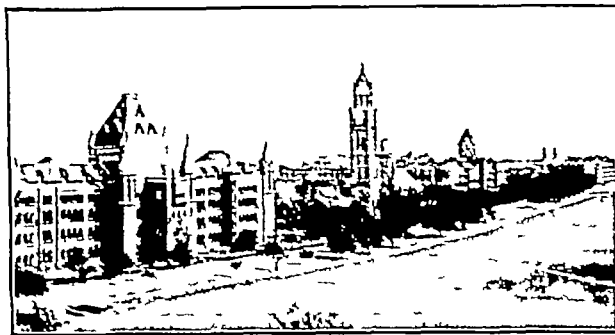
HIGH COURT, BOMBAY

when a judge was appointed, a house was taken as a Court of Judicature. The house was, however, never used, and the judge continued in his hired quarters until 1677, when the Court was housed in Mapla Por on the west side of Bora Bazar Street, which owed its existence to Gerald Aungier, as already indicated. After migrating from place to place, His Majesty's judges have been settled since 1878 in the present buildings. The main staircase and entrance for the general public are on the east, the judges having two private staircases on the western side. The

Sessions Court is decorated in cream and gold, and contains, among other portraits, one of Sir John Peter Grant, subscribed for by the people of Bombay.

Paper Currency Office

Adjoining the High Court are the Public Works Secretariat. Skirting this building, we come out on the Esplanade Road with its numerous offices and banks, the most notable of which is the



[Photo Clifton and Co

HIGH COURT, CLOCK TOWER AND SECRETARIAT, BOMBAY

Currency Office. On March 1, 1862, Colonel Ballard, Master of the Mint, was appointed Commissioner of Issue, and the Bank of Bombay was constituted the office of agency for the transaction of note-exchange business. The arrangement with the bank was not approved by the Secretary of State. The Paper Currency Department, therefore, worked as a regular branch of the public service under the direct supervision of a Mint Master. The office of Currency Commissioner was, however, subsequently withdrawn from the Master of the Mint and vested in the Accountant-General of Bombay. The old building, known as No. 1 Rampart Row, was originally rented by the bank to Government for the accommodation of the Paper Currency Department. After the failure of the bank Government purchased the building from the liquidators in 1868. It was extended considerably at different intervals.

Among the prominent banks on this road may be mentioned the Comptoir National d'Escompte de Paris, the National Bank of India, the Mercantile Bank, the Central Bank of India, the Bank of India, the Chartered Bank of India, Australia, and China.

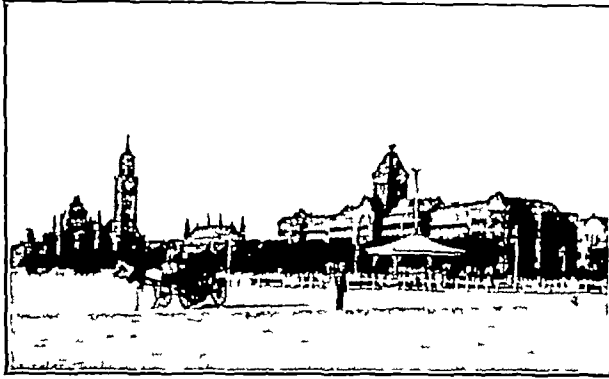
Floral Fountain

In the centre of Elphinstone Road, opposite Churchgate Street, is the Floral Fountain erected in honour of Sir Bartle Frere, to whose foresight and progressive policy Bombay owes many of her public buildings. Surrounding this fountain originally was a grass plot dotted with palm trees. This plot was removed some years ago to meet the growing requirements of pedestrian and horse traffic between the tram lines and the kerb of the

fountain Shorn of that setting the fountain still forms a notable landmark in the locality

Bombay Gymkhana

From the Floral Fountain the road divides into two sections, one leading towards the Victoria Terminus and the other to Dhobi Talao. The latter route leads to the fine marble statue of Queen Victoria. Near by is the Bombay Gymkhana for European residents. The building consists of a beautiful double-storey pavilion facing the cricket ground.



[Photo Clifton and Co

PUBLIC BUILDINGS, BOMBAY

For the Indians there are several gymkhanas on the Kennedy sea-face, between the Marine Lines and the Charni Road Station.

Victoria Terminus

This magnificent railway station, named after Queen Victoria, is believed to be one of the finest stations in the world. Before it was opened for traffic there was a miserable wooden structure "which did duty as a terminal station." Victoria Terminus was designed by the late Mr F W Stevens, and completed in 1888. The administrative offices form three sides of a rectangle enclosing an ornamental garden, at the gates of which are a massive lion and tiger carved in stone. The offices are on the upper floors, and on the ground floor are the waiting and refreshment rooms, booking, telegraph, and other departments. The most prominent feature in the elevation is the high dome rising over the centre portion, adorned with a large figure representing "Progress." A statue of Queen Victoria occupies a niche below the clock in the centre of the building. Marble columns support the lofty roof and entrance façade of the booking office. The main entrance for passengers is on the Hornby Road side, through four great doorways opening into the booking office.

Trains for Central India, Southern India, Bengal, and the Punjab start from this station, which is also the terminus of local trains, running as far as Kalyan, about thirty miles from Bombay. The local service has been recently electrified.

Municipal Offices.

Opposite the Victoria Terminus are the Municipal Offices, a very handsome and imposing edifice, surmounted by a tower which is conspicuous all over the city. It abuts on Hornby Road on one side and on Cruickshank Road on the other. On December 19, 1884, Lord Ripon, then Viceroy of India, laid the foundation stone of the building, which was completed in 1893, and is in the early Gothic style of architecture, while the several domes which rise above the gabled roofs impart an Oriental aspect to the design. The imposing façade, with its magnificent tower 235 feet high, is flanked by two wings which abut on Hornby and Cruickshank Roads. Over the façade is placed a colossal allegorical figure representing *Urbs prima in Indis*.

The Corporation Hall is 65 feet long by 32 feet broad, and is 38 feet in height. Its northern end is ornamented with a large bay window fitted with stained glass, bearing the arms of the Corporation and flanked by canopied recesses of stone. The southern end opens into a lounge for the use of councillors, which leads through glass doors on to a terrace above the southern entrance of the building. The hall contains two galleries for the public. In front of the main porch is the statue of Sir Pherozeshah Mehta, Bombay's foremost citizen in his days and uncrowned king of the Corporation, who raised that body in the estimation of Government and the public.

School of Arts

Proceeding from the Municipal Office to the Crawford Markets, we pass on the way the famous printing press of the *Times of India*. It is a very fine building, worthy of the oldest and the most powerful newspaper in the city. In the same line stands the Anjuman-i-Islam, one of the earliest organisations started to hold the torch of knowledge before the sons of Islam, the majority of whom are still steeped in ignorance. Then we approach the shady and nicely kept grounds of the School of Arts. The main building, which lies back from the road, is unpretentious in design, but well adapted to the purpose for which it was built. There are private studios for the masters, general class-rooms and store-rooms of varying dimensions. A splendid library and museum is located above the large hall on the ground floor. Some of the most interesting work of the studio is carried on in the Lord Reay art workshop, situated in the compound of the school, and named after the ex-Governor of Bombay, by whom they were formally opened in 1890. The workshops were started with the object of imparting technical instruction in some of the artistic handicrafts for which the Presidency has acquired a reputation, such as cabinet-making and carving, carpentry, weaving, iron-working, jewellery, and metal work. A number of skilled workmen are employed as teachers and instruction is given in gold and silver chasing, engraving and repousse work.

enamelling on metals, ornamental copper, brass and iron work. In the School of Art proper, instruction is given in decorative painting, architectural sculpture, wood engraving, and ornamental pottery. To this has been recently added mural painting, and the students turn out some excellent work in all branches.

Birthplace of Rudyard Kipling

The idea of establishing a school of art in India followed a similar movement inspired by the Exhibition of 1851. In 1853 Sir Jamsetjee Jejeebhoy offered his handsome donation, and in 1857 a beginning was made with the opening of drawing classes. By 1866 several studios were added, one of which was for sculpture, under Mr. Lockwood Kipling, whose famous son, Rudyard Kipling, was born there. The latter's poem, in which he says "Of No Mean City Am I," bears testimony to his pride for the place of his birth.

So thank I God my birth
Fell not in isles aside—
Waste headlands of the earth,
Of warring tribes untried—
But that she lent me worth,
And gave me right to pride

Surely in toil or fray,
Under an alien sky,
Comfort it is to say
"Of no mean city am I!"

(Neither by service nor fee
Came I to mine estate—
Mother of cities to me,
For I was born in her gate,
Between the palms and the sea,
Where the world-end steamers wait.)

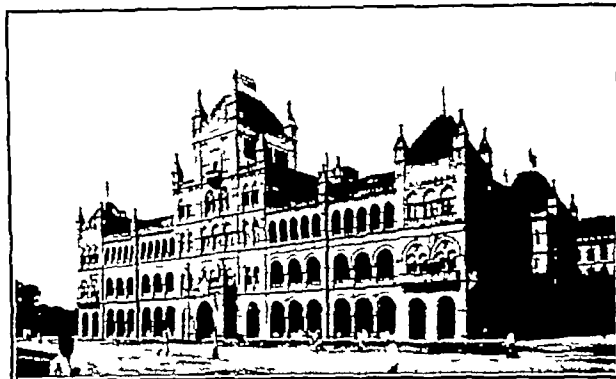
Now for this debt I owe,
And for her far-borne cheer,
Must I make haste and go
With tribute to her pier

The Arthur Crawford Markets

The Arthur Crawford Markets are the most important source of food supply in the city and occupy a commanding position at the junction of Esplanade, Paltan, and Carnac Roads. Of the many improvements of lasting importance carried out under the régime of Arthur Crawford, the first Municipal Commissioner of Bombay, between the years of 1865 and 1871, these markets are the most conspicuous. The fruit and flower stalls present an alluring appearance. Nowhere else can be seen such a large variety of fruit nor more representatives of almost every nationality in the world. Oranges of every kind from all parts of the country and from Zanzibar, apples from Kulu, Cashmere, and Australia, grapes from Quetta, Kabul, and Italy, mangoes from Salsette and Gor, peaches, chicones, custard apples, and bananas of all varieties, pears, papayas and various other kinds of fruits, sustain a brisk trade from dawn till night, but the rush is greatest in the early morning when the business commences.

Many cooks and butlers of hotels and private establishments sleep outside the market walls in order to obtain the pick of the supplies, not only of fruit and vegetables, but also of meat and fish, as soon as the markets are opened to the public.

The building, which is constructed of coarse rubble, relieved by a bright red stone, consists of a central hall with three large gateways, above which is a clock-tower indicating the Bombay local time instead of the standard time, which is thirty-nine minutes in advance of the local time. Above the market are offices and residential quarters. The stalls for the sale of beef, mutton, and fish are located in small plain buildings outside the



[Photo Clifton and Co

ELPHINSTONE COLLEGE, BOMBAY.

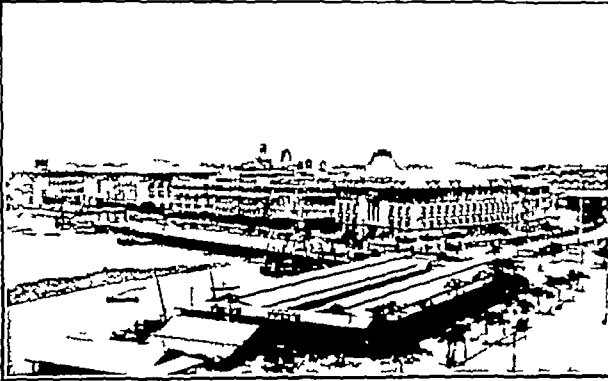
fruit and vegetable markets, in grounds comprising a garden having in the centre a fountain designed by Emerson, the panels round it bearing figures of females intended to represent the principal rivers of India. These were sculptured by the father of Mr. Rudyard Kipling. On the south side of the garden is a live poultry market where parrots, cockatoos, canaries, dogs, monkeys, and other pets can also be purchased.

Juma Mosque

The Crawford Markets are on the border line separating the native from the European portions of the city. To the north lies the native town teeming with shops of all commodities and people of all communities. Abdul Rehman Street, one of the busiest thoroughfares, begins here, and leads to Pydhony. At the junction of the road with Shaik Memon Street is seen the Juma Masjid, the largest and most noteworthy mosque in Bombay. It is a quadrangular pile of brick and stone, encircled by a ring of terrace-roofed and double-storeyed buildings, the ground floors of which are let out as shops. The chief or eastern gate of the mosque leads directly across an open courtyard to an ancient tank, which is now furnished with masonry steps and embankments and contains about ten feet of stagnant water filled with gold and silver fish. From the depth of the tank rise sixteen black-stone arches supporting the whole fabric of the mosque, the upper stores being upheld by five rows of wooden pillars, each of which contains a receptacle of sacred books.

The Bazar

Now we are in the thick of the Bazar wherein people from all parts of the world jostle each other. It is the most picturesque scene imaginable, and while the eye is bewildered by diverse costumes and head-dresses, and by the unending varieties of colours in strange juxtaposition, the ear is assailed by the noise and din characteristic of an Indian street. Here are hawkers loudly shouting their wares, there is a group of beggars



OFFICES OF
P & O and B L S N. COMPANIES, BOMBAY.
Designed by GREGSON, BATLEY and KING



RESIDENCE FOR H H
THE MAHARAJA SCINDIA, BOMBAY
(Looking out from the main staircase to the
Belvedere Loggia, with the sea beyond)
Designed by GREGSON, BATLEY and KING



IMPERIAL BANK OF INDIA, BOMBAY
Designed by GREGSON, BATLEY and KING

praying for alms in a sing-song which passes for music, varied by deafening voices proclaiming their woes to the passers-by or showering blessings on persons flinging copper coins to them. Finishing the round of the Bazar, the visitor returns to the Crawford Markets. The Central Police Offices are situated opposite the market at the junction of Hornby Road and Carmichael Road. Turning to the west from this corner one comes to the Goculdas Tejpal Hospital, another institution which owes its existence to the zeal of Arthur Crawford, who induced the donor, Goculdas Tejpal, while on his death-bed, to give a donation to proceed with the project of a hospital that had to be suspended for want of funds. The building is spacious and the internal arrangements excellent although it has no architectural pretensions.

Elphinstone High School

In the close vicinity of the hospital there are the Elphinstone High School and the St. Xavier's College. The Elphinstone High School, established a century ago to commemorate the name of one of the most sagacious and popular Governors, occupies a very prominent position among the educational institutions of the city. With its massive flight of steps and cloisters it presents a very imposing appearance. It has nearly thirty class-rooms, several masters' rooms, and a fine hall on the first floor encircled by a broad passage-way. Above the hall is a large library. To the cost of this handsome edifice Sir Albert Sassoon contributed the princely sum of £15,000.

St. Xavier's College

No less imposing is the building of St. Xavier's College crowned by a tower surmounted by a fine statue of St. Francis Xavier, the Apostle of India, after whom the college is named. The staff consists of the members of the Society of Jesus. The distinguishing feature of the college is its physical and chemical laboratory, equipped with the latest scientific instruments and appliances. St. Xavier's Middle School is situated quite close to the original building, and contains a chapel, two halls, and several class-rooms.

Cama Hospital

Next in order comes the Pestonjee Hormasjee Cama Hospital for women and children. Its foundation stone was laid by H. R. H. the Duke of Connaught in 1883, and the building was opened by Lord Reay, the ex-Governor of Bombay, in 1886. It owes its existence to the munificence of Pestonjee Cama, after whom it is named. Between this hospital and the Municipal Building is situated the Police Court Building, in which the Chief and the third Presidency Magistrates hold their courts.

Returning to the Victoria Terminus, we come to the Victoria Place where there are statues of several Bombay worthies. Farther along to the east is the General Post Office built in the Saracenic style with a vast central dome.

Town Hall.

Turning thence the corner into what is known as Mint Road, the visitor passes the Fort Market and arrives at the Town Hall, with its fine steps. In early days the chief room in Aungier's Court of Judicature (Mapla Por), to which reference has already been made, was styled the Town Hall. In 1786 accommodation was provided in Hornby House (later the Great Western Hotel), and the main room of that building served for the next few years as a Town Hall.

The origin of the present Town Hall is interesting. The idea of erecting a separate building was first mooted by a Government servant named Henshaw in 1793, it was again brought forward by Sir James Mackintosh in a letter to the Bombay Government in 1811, and was finally adopted by Government, who, on the representation of Messrs Forbes and Co and Bruce Fawcett and Co, sanctioned the holding of a lottery for raising the necessary funds. This venture having proved very successful, Government sanctioned the raising of a second lottery. It, however, met with poor success, so that nothing could be done until 1820, when a third lottery was instituted. The amount thus raised sufficed to commence but not to complete the building. After considerable delay it was finished in 1833.

The style of the structure is classic, its exterior character being Doric, while the inside is Corinthian. It consists of a basement occupied by some of the offices of Government and an upper storey about 260 feet long by 100 feet wide. The large hall contains a fine organ presented by Sir Albert Sassoon to commemorate the visit of H R H the Duke of Edinburgh in 1872. The hall is frequently used for public meetings, concerts, and balls, and contains a statue of Mountstuart Elphinstone. A statue of Sir Charles Forbes is in the south vestibule, and in the north vestibule are statues of Stephen Babington, John Malcolm, Lord Elphinstone, Jamsetjee Jejeebhoy, Bartle Frere, and others. The library of the Bombay branch of the Royal Asiatic Society occupies the north end of the central hall, and the Durbar room, so called on account of its being used for State purposes before the completion of the Secretariat, is situated at the south-east corner of the hall.

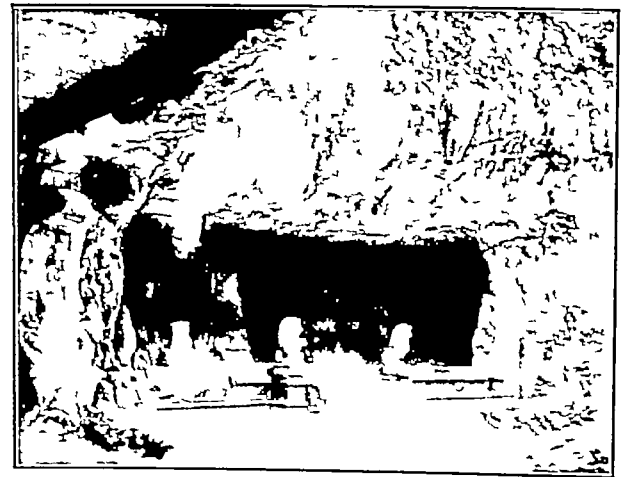
Bombay Castle

Immediately behind the Town Hall is the historic Bombay Castle, an interesting remnant of the old fortifications of the city. The most prominent object about its ancient bastions is its flagstaff, from which floats the Union Jack, and from the yards of which the arrival of steamers and other vessels entering the harbour is signalled. There is also a clock tower with a time ball, which is in electrical connection with the observatory at Colaba, and which falls every day at 1 p.m. In its secluded position away from the main road the Castle is practically hidden from the sight of the tourist, but it is well worth a visit. It was the earliest Government residence, and although it is

no longer the seat of Government, all Government Resolutions and Orders are addressed even to this day from "Bombay Castle."

The Mint

Contiguous to the Castle is the Bombay Mint, a plain building with an Ionic portico. The site was originally reclaimed from the sea under the Mody Bay Reclamation Scheme. An inscription on the building shows that it was designed and constructed by Major John Hawkins of the



[Photrs. Clifton and Co.]
CAVES OF ELEPHANTA, NEAR BOMBAY

Bombay Engineers and completed in 1829. The original plan of the building took the form of a hollow square 300 feet each way, with a quadrangle in the centre, 124 feet by 116 feet. These features have not been disturbed, but considerable alterations and extensions have been made. Here may be seen balances capable of showing differences of half a grain and weighing down even to the one-thousandth part of a grain. There are several automatic coin-weighing balances which



[Photo Clifton and Co

TOWN HALL, BOMBAY

detect the slightest difference in the weight of a piece, rejecting automatically the light or heavy ones, while they retain those of standard weight. Among the other marvels of inventive skill in the Mint are the die-casting, founding, and stamping machines.

St Thomas's Cathedral

Emerging into the Elphinstone Circle Garden, the visitor is confronted with St Thomas's Cathedral, one of the oldest buildings in Bombay, containing many fine monuments of historical interest. It consists of a nave, 120 feet long and 65 feet broad, with three aisles and a domed roof of three regular arches supported upon a double row of 14 columns, approaching the Tuscan, with an apex about 30 x 35 feet intersected by lancet windows. The arch of the chancel is about 60 feet high, and on the right of it is situated the organ chamber. The tower holds a chiming clock.

Before 1675 the English in Bombay had no church, and for more than forty years after that date the only place for divine worship was a room situated in the Castle and called the Fort Chapel. In 1674 a scheme for building a garrison church was projected. But by the time the walls had risen to a height of 15 feet the funds mysteriously disappeared, and the bare walls remained for a generation a gathering place for animals—"an object of derision to the natives and a reproach to the English in Bombay." The scandal was, however, removed on the arrival in Bombay, in 1714, of the Reverend Richard Cobbe, Chaplain to the East India Company. He exhorted his congregation to "wipe away the reproach of being godless in the sight of the heathens." Money

and benefactions were readily offered, the foundation of a new edifice was laid, and on Christmas Day, 1718, the church was formally opened by order of the Governor, Charles Boone. In order to keep the fabric in repair, a duty of one half per cent was levied on all goods imported into Bombay.

Among the memorials the finest are those erected to Jonathan Duncan, Governor of Bombay (1795-1811), to Captain Hardinge, R.V., a younger brother of Lord Hardinge, who fell in the victorious naval engagement off the coast of Ceylon between the British ship *San Floren* and the French frigate *La Pied Montaise* to Stephen Babington, reviser of the judicial code, whose statue now stands in the Town Hall, and to Bishop Carr, whose effigy in marble, in full episcopal robes, reposes in the southern transept. Other monuments of historical interest are those to Brigadier-General Carnac, who defeated the Shahzada in 1761, to John Watson, Superintendent of Marine, who was killed at the siege of Thana in 1774, to Admiral Maitland, to whom, when in command of H.M.S. *Bellerophon*, Napoleon surrendered, to Colonel Burton Barr, who won the battle of Kirkee, and to Major Eldred Pottinger, the heroic defender of Herat. An attractive specimen of Bacon's sculpture is the medallion in memory of Mrs Kirkpatrick on the wall.

In the monument chest are preserved two silver chalices of considerable age. The first, which James Douglas has styled "the oldest tangible memorial of our existence as an English settlement," was presented by Gerald Aungier to the Christian community of Bombay in 1675. It bears the following inscription: *Hunc calicem eucharistiarum esse voluit Honorabilis Geraldus Aungierus, insulae Bombayae Gubernator, ac pro rebus Honorabilis Anglorum Societatis Indies Orientalibus mercatorum agentium prae ses*. Of the other chalice no record whatever remains, nor can one hazard a conjecture as to how it came into the possession of the Cathedral. The following words are inscribed upon it: "The gift of the Greenland merchants of the City of York, 1632."

Coming out into the Apollo Street one passes the new building of the Imperial Bank of India, the most conspicuous building in the locality, and returns to Apollo Bunder. This completes the circuit round the Fort. Considerations of space forbid an account of numerous other places and institutions of interest in the town, such as Afghan Memorial Church (Calaba), Bhai Sakarbai Dinkhu Petit Hospital (Parel), Bombay Club (Esplanade Road, Fort), Bombay Observatory (Colaba), Bvella Club (Bellasis Road), David Sassoon Industrial and Reformatory Institution (Matunga), Government House (Malabar Point), Hanging Gardens (Malabar Hill), King's Circle (Matunga), Masonic Hall (Ravelin Street, Fort), Orient Club (Chowpatty), Panjrapol (Colaba), Patel Tank), Towers of Silence (Malabar Hill), Victoria Gardens (Parel Road), etc.

Bombay's New Water Supply.

The new water-supply of Bombay is the greatest achievement of its kind in the history of the world. The nearest approach to it is the water-supply of New York, which is derived from a source 50 miles distant. The supplies of Liverpool, Manchester, and Birmingham have farther to go, but they are conveyed partly in open channels. The new water-supply of Bombay is obtained from Lake Tansa, 55 miles from the city, and is conveyed by two pipes, each six feet in diameter, from Tansa to Powai. Thence the supply passes into three pipes, two of them being 57 inches in diameter, which continue to Bombay, and the third of sixty inches diameter, which is laid to Ghatkopur, is connected with the two existing Tansa mains 48 inches in diameter, the whole combination forming, as already indicated, the largest and longest pipe-line ever laid.

Bombay, with an estimated population of 1,327,000, is the third largest city in the British Empire, and its new water-supply furnishes 78 gallons per head daily, a figure which compares favourably with that of other large capitals. Bombay's new water-supply scheme, therefore, is romantic alike in its urgency, its planning, and its execution. That an Asiatic city should plan and execute a civic water-service on a scale unequalled in Europe or the United States is truly remarkable, that it should be carried out by a firm of British contractors who had not specialised in this type of work is also remarkable, but most remarkable of all is the fact that the contractors, Messrs Braithwaite and Co., Engineers, Ltd., solved the problem along entirely new lines.

Very keen competition entered into the tendering for this enormous pipe-line, the weight of its steel being 90,000 tons. Engineering firms specialising in steel-pipe manufacture from all parts of the world, whose names are familiar as household words, vied with each other for this large undertaking. At the time the tenders were received the steel market in Britain was in a very unsettled condition, and in a ferment of labour trouble. Messrs Braithwaite and Co. made a bold bid for the work by co-operating with Messrs Dorman, Long and Co., Ltd., and arranging to place the supplying of the steel plates in their hands if they should prove successful. This resulted in their tender being accepted.

The surrounding conditions of the work were inspected and the problems investigated. Very few methods had to be improvised as the work proceeded, because very few requirements had been overlooked. Many kinds of labour-saving methods and devices were utilised. Nothing was left to chance if forethought could provide for it. When the plan of transporting the "pipes" in the form of flat plates was decided upon, other necessary procedures followed. The 90,000 tons of flat steel plates required for the contract were supplied by Messrs Dorman, Long and Co., Ltd.,

from their Redcar works, and were planed and scarfed by them before shipment. All the rivet-holes for jointing the pipes were drilled to a total number of 40 million. So accurately were these holes drilled to template, both as to size and position, that no adjustment—not even any reaming of the holes was necessary when the plates arrived in India. The longitudinal joints, after the plates were bent, were found in all cases to fit exactly, but what is more noteworthy is the fact that when the resulting circular joints of the pipes were fitted in, end to end, they gave no trouble at all, notwithstanding that the joints were staggered. That is to say, the longitudinal joints, as laid, were not allowed to be in the same straight line on two adjacent pipes.

The pipes were made at Messrs Braithwaite and Co.'s works which they had erected specially for the job at Mulund, near Thana, about 18 miles from Bombay. Mulund was chosen for its general accessibility to the approximate meeting point of the pipe track, and is served by a siding of the Great Indian Peninsula Railway. These works occupy an area of 55 acres, and some idea of the time and labour-saving devices in operation there may be obtained by mention of the magnet cranes, which can unload from the trucks as much as 100 tons per hour and load them into stacks. The equipment also comprises four plate-rolling machines each driven by a 20 h.p. motor as a separate unit. The plates rolled in these machines are uniformly $\frac{3}{8}$ of an inch thick and 7 feet 4½ inches broad. The length varies—some being 15 feet long—according to the size desired to roll.

The 40 million rivet-holes, already mentioned as having been drilled in England before the despatch of the plates, naturally involved about half that number of rivets having a total weight of 2,000 tons. It will be realised that, by the process described, nearly all the rivetting required was done in the Mulund shops. This is because eight lengths of pipe were rivetted together at Mulund, leaving only one joint in eight that needed to be rivetted in the field. This itself led to a very considerable economy, because it was found in general terms that it cost ten times as much to drive rivets on the pipe-line at the point of installation as it did to drive them in the Mulund shops, where some hundreds of Consolidated Pneumatic Tool Co.'s "Bover" type rivetting and chipping and caulking hammers were installed.

The installation of suitable machinery was accompanied by careful planning for the saving of labour wherever human effort was inevitable. Due provision was made for the commissariat and welfare of the native workers. Along the track camps were organised, the sites being selected under medical supervision, not so much for their convenience to the section being laid, as to ensure the health of the staff.

An incidental part of the scheme was the bridge across the Basin Creek consisting of 13 spans of 138 feet each.

COMMERCIAL BOMBAY.

TATA SONS, LTD , Bombay House, Bruce Street

THE great house of Tata was founded by the late Mr J N Tata, whose fertile brain conceived such gigantic industrial projects as the establishment of the iron and steel industry in India and the harnessing of the potential hydro-electric power of the huge rainfall in the Western Ghats. Mr Tata also played an important part in the development of trade and commerce between India and Japan, and rendered great assistance to the Nippon Yusen Kaisha in their efforts to build up business with India. He was an enthusiastic protagonist of Swadeshim long before the word Swadeshi became familiar to Western ears, and it is due to his personality, untiring energy, keen powers of observation, acumen, and truly patriotic spirit that the house of Tata has contributed so much to the industrial development of India.

The companies founded by or associated with the firm of Tata Sons, Ltd , are many and diverse. In magnitude and variety of interests there is perhaps no other concern in the British Empire that embraces activities so widespread as this Indian house. Iron and steel and their associated manufactures, hydro-electric power, cotton mills, cement factories, construction and building companies, banking and insurance, an engineering company and an oil mill, hotels and trading companies, are amongst their undertakings in a country which is but still in the initial stages of industrial development. The combined capital of these concerns is nearly £50,000,000, and they provide maintenance for about a quarter of a million people.

R D TATA and CO , LTD

THE large export and import business which the branches of Messrs Tata Sons, Ltd , in China, Japan, and elsewhere were transacting was handed over to a new limited concern known as R D Tata and Co , and this company is now carrying on the trading activities of Tata Sons, Ltd , having branches at Osaka, Shanghai, Rangoon, Liverpool, and New York. It has a capital of fifteen million rupees, and is mainly interested in cotton yarns, rice, metals, sugar, etc.

The directors of Messrs Tata Sons, Ltd , are Sir D J Tata, Kt (chairman), Lady Ratan Tata, N B Saklatvala, C I E , J D Ghandy, F M Kanga, B J Padshah, H P Gibbs, J C K Paterson, C I E , J R D Tata.

The firm's telegraphic address is "Tatasons," and the codes used by them are the A1, A B C McNeill's Mining, Western Union and Bentley's. Their corresponding firm is Messrs Tata, Ltd , London.

Messrs Tata Sons, Ltd , are managing agents of Tata Iron and Steel Co , Ltd , Tata Hydro-Electric Power Supply, Central India Spinning, Weaving and Manufacturing Co , Ltd , Swadeshi Mills Co , Ltd , Ahmedabad Advance Mills, Ltd , Tata Mills, Ltd , Indian Cement Co , Ltd , Indian Hotels Co , Ltd , Associated Building Co , Ltd , Tata Oil Mills Co , Ltd , Shahbad Cement Co , Andhra Valley Power Supply Co , Ltd , Tata Power Co , Ltd , Kundry Power Co , Ltd.

TATA IRON and STEEL CO , LTD

THE idea of utilising upon the largest possible scale the iron deposits of India had for more than twenty years been active in the brain of the late Mr Jamsetjee N Tata, and, in spite of many obstacles, he never abandoned the hope of developing the mineral resources of his country. In 1902 he obtained advice and assistance from the United States, and in 1905 his prospector, Mr C M Weld, succeeded in locating one of the richest iron-ore deposits in the world, with a metal content of 66 per cent , in the Rajara hills in the Central Provinces and in the neighbouring Dhulee Hill. The discovery, however, of the Gurumaheshwari deposits in the State of Mowbhay provided more favourable opportunities for immediate operations on account of the proximity of the Jheria coalfields. These were leased on favourable terms from the Maharajah and two years later the Tata Iron and Steel Co , Ltd , was registered at Bombay

on August 26th, 1907. The actual construction of the plant at Sakchi (now Jamshedpur) was begun in the autumn of 1908.

The first blast furnace was blown in 1911. Since that time four more furnaces have been put into blast, the output from the five furnaces being estimated at 50,000 to 60,000 tons per month. The steel-making plant originally consisted of one 300-ton mixer and four 40-ton basic open hearth furnaces. The capacity of these four furnaces has been increased to 50 tons, and three more furnaces of 60 tons capacity have been added. The output has been further increased by the addition of two 200-ton open hearth tilting furnaces, one 300-ton mixer and two 25-ton Bessemer converters have been installed to work in conjunction with these two furnaces. The estimated steel ingot production is 570,000 tons a year.

The original capacity of the coke plant, 180,000 tons per annum, has been developed to no less than 820,000 tons. Large additions have been made to the rolling-mill plant, the total output of which is now 1,150 tons per day, and in every direction the main works of the company, the various subsidiary interests, and last, but not least, the remarkable activities in connection with the health and well-being of the town of Jamshedpur and its population have been extended to a point of efficiency which is the admiration of every visitor.

The original capital of the company, Rs 2,31,75,000 (£1,545,000), has been increased to Rs 10,52,12,500.

The Jamshedpur works are situated in the Singhbhum District, Bihar and Orissa, and are connected by a three-mile branch line owned by

the company with the Bengal Nagpur Railway main line running from Bombay to Calcutta at Tatanagar Station.

When the project of erecting the works was taken in hand in 1907 the site was a typical Indian jungle. After the arduous labour of clearing the ground was ended construction commenced, and by 1911 a complete iron and steel-making plant was in being. The company's own and other important coalfields lie to the north, whilst its iron mines are situated from forty to fifty miles to the south. Dolomite is obtained from the company's properties at Panposh and "K" Lease in Ganga-pur State, while limestone is drawn from the Sakti State and the adjoining Bilaspur District. Manganese is supplied from the Central Provinces, chromite from Chaibasa in the Singhbhum District, and magnesite from Kada Kola in Mysore State.

TATA HYDRO-ELECTRIC POWER SUPPLY

THIS, one of the most important of the many Tata companies, originated as the result of years of work and propaganda by the late Mr David Gosling, of Bombay, who devised a scheme to conserve the heavy rainfall of the Western Ghats and to utilise it for the supply of power to the City of Bombay. The scheme was taken up by the late Mr J N Tata, afterwards by his sons, and the company was formed about 1910, the present hydro-electric works being opened in 1915.

Hydraulic Works Three lakes are formed by constructing dams across valleys at Lonavla, Walwhan and Shirwata. Lonavla Lake is intended for use during monsoon, the other two lakes, together holding about 9,500,000,000 cubic feet, for use during the rest of the year. Shirwata and Walwhan are connected by a tunnel 5,000 feet long through the intervening hills. From Walwhan and Lonavla water is conveyed by nearly five miles of open ducts to the forebay and thence through large steel pipes laid along the slopes of the Ghats to the power house at Khopoli, 1,725 feet in the plains below.

Power House At full load the power house is capable of generating 50,000 h p. The water, after it has exhausted its energy in turning the water-wheels, is released into what is called a tail-race, which flows into a neighbouring stream. The amount of water going into this stream when all five generators are working would equal two-thirds of the volume of the River Thames.

Transmission to Bombay As the power house is forty-three miles from Bombay, the current, which is produced at 5,000 volts, is transformed to 100,000 volts to economise the cost of its transmission to Bombay. It is conveyed along two transmission lines of three copper cables, each supported on specially designed steel towers. In Bombay it is again reduced to a lower voltage at the Parcel Receiving Station for distribution to the company's various consumers. The energy thus available helps to run forty-four of the largest

cotton mills and factories of the city and also contributes towards its lighting and tram traction.

Distribution The whole of the distribution in the city is done by underground cables at 6,600 volts. Each consumer has a small station, where the current is again reduced to 2,200 volts for working the motors that drive the machinery in the factory. The power thus delivered costs the consumers very much less than that available for coal, and the success of the scheme was demonstrated so completely that two other schemes, the Andhra Valley and Nila Mula, each larger than the preceding one, have recently been completed.

Andhra Valley Scheme The holding up of the waters in the Andhra Valley by a dam 195 feet high makes another 60,000 h p available for the electrification of about thirty-five more factories in Bombay. The power house, electrical equipment and receiving station are furnished with the most up-to-date plant, an interesting feature of the latter being the two 12,500 KVA 22,000 volts rotary condensers which are used only for improving the power factor of the system.

Nila Mula Scheme The other scheme in the neighbouring valley of the Nila Mula river produces another 150,000 h p. The dam required for this is probably the largest in the world as regards the quantity of masonry needed for its construction, and the power available is sufficient to electrify all the remaining factories in the city of Bombay, to take over the whole of the tramways and lighting load of that city, and to run railways along each of the two main trunk lines, both ways, for about 100 miles out of Bombay.

Central India Spinning, Weaving, and Manufacturing Co., Ltd. This concern, the first industrial venture of the late Mr J N Tata, was started in 1874 and the mill at Nagpur began working from January 1st 1877. It rapidly became one of the most successful cotton mills

in India Capital, Rs 96,87,500 Looms, 2,220, spindles, 100,352 Annual output, 17,164,300 lbs of yarn and 7,531,000 lbs of cloth

Svadeshi Mills Co, Ltd Started in 1887 with a capital of Rs 10,00,000 The present capital is Rs 20,00,000 Looms, 1,542, spindles, 60,208 The company purchased another mill in 1925 with 43,920 spindles and 1,187 looms Combined output, 7,923,906 lbs of cloth and 9,611,264 lbs of yarn

Ahmedabad Advance Mills, Ltd Operations were commenced in 1903 Present output 2,813,042 lbs of yarn and 2,397,746 lbs of cloth, from 600 looms and 30,612 spindles Capital, Rs 10,00,000

Tata Mills, Ltd This company was started in 1913 with an issued and subscribed capital of Rs 64,85,000 The mills commenced working in 1917 Looms, 1,800, spindles, 62,348 Annual output, 5,330,300 lbs of yarn and 5,622,000 lbs of cloth The Bombay United Mill, which was purchased in 1920, was sold in 1925

Cement Companies The works of the Indian Cement Co, Ltd (capital, Rs 36,77,150) at Pore-

bander have a capacity of 30,000 tons of Portland cement per annum The Shahabad Cement Company's works in H E H the Nizam's Dominion have a capacity of 40,000 tons per annum

Tata Oil Mills Co, Ltd Capital Rs 97,62,000 The works, situated at Tata puram (Cochin State), produce coconut oil and cake, groundnut-oil and cake and cocogem, and have a maximum crushing capacity of 225 tons daily

Associated Building Co, Ltd The boom of 1919-20 and the great rise in the value of office space in the business quarter of Bombay indicated the necessity for the various Tata concerns providing themselves with their own premises A scheme was accordingly prepared for capital to be furnished by each company according to its means and requirements, and a very central plot of land was acquired on which a palatial building known now as Bombay House has been erected A limited company was formed for this purpose by capital provided by the various concerns, and is known as the Associated Building Co, Ltd It has a capital of Rs 55,00,000

KILLICK, NIXON and CO, Merchants

THE year 1857, when the Indian Mutiny broke out, was a bad one for business in India Nevertheless, it was in that year that Messrs Charles Killick and Robert Preston Nixon joined in partnership together under the style of Killick, Nixon and Co, and laid the foundations of a general merchandising and agency business that has developed very greatly, and has its ramifications throughout the peninsula In 1875 the firm took over the business of Edward Lawrence and Co, and in 1898 that of Edward Bates and Sons

Many changes have naturally occurred in the personnel of the firm The present partners comprise Sir T W Birkett and Mr H P Hebblethwaite, London, and Messrs F C Annésley, E C Reid, and G C Philipps The firm's telegraphic address is "Killick," Bombay, and they use all the standard codes They have a branch at Mormagoa, and their correspondents in London are Messrs Nixon, Forrest and Co, 29, Great St Helen's, E C 3

Messrs Killick, Nixon and Co are managing agents of the Bombay Steam Navigation Co, Ltd, which was formed in 1906 and purchased from Haji Ismail Hassan the coasting steam trading concern well known as "Shepherd's," which was established by Mr J A Shepherd, of Bombay The entire fleet of vessels was transferred to the company, but has since been considerably increased Mail services are maintained by the company on the Konkan coast throughout the fair-weather season, the vessels calling at all ports between Bombay and Panjim, and cargo boats ply regularly between Bombay and Mangalore, Bhavnagar, the Gulf of Cutch, Kathiawar, and Karachi Goods are booked through, in

and Agents, Killick Building, Home Street

either direction, between stations on the Madras and Southern Mahratta and the Kathiawar railway companies The Bombay Steam Navigation Co, Ltd, have a fleet of launches plying on the principal creeks on the Konkan coast, and they have also the control of a harbour ferry service in Bombay The company was initiated by Messrs Killick, Nixon and Co, and the authorised capital is Rs 60,00,000 Messrs Killick, Nixon and Co are also managing agents of the following

Tapti Valley Railway Co, Ltd
Ahmedabad Porbander Railway Co, Ltd
Ahmedabad-Dholka Railway Co, Ltd
Armutisar Patti Railway Co, Ltd
Central Provinces Railway Co, Ltd
Guzerat Railways Co, Ltd
Mandri Bhon Railway Co, Ltd
Sialkot Naraowal Railway Co, Ltd
Sara-Serajganj Railway Co, Ltd
Mymensingh Bhairab Bazar Railway Co, Ltd
Hingl Rampur Coal Co, Ltd
Ahmedabad Electricity Co, Ltd
Kohinoor Mills Co, Ltd
Central India Mining Co, Ltd
Shivripur Syndicate, Ltd
Bundi Portland Cement, Ltd

Messrs Killick, Nixon and Co are agents for
Punjab Portland Cement
Surat Electricity Co, Ltd
Western Australian State Saw Mills Ltd
Perum Coal Co, Ltd
Callender's Cradle and Construction Co, Ltd
Boase Spinning Co, Ltd, Dundee
Gandy Belt Manufacturing Co, Ltd, Glasgow
Cheshire
Bird and Co, Calcutta
Harrison Line of Steamers
Bibby Line of Steamers
Ellerman, City and Hall Lines, Ltd
Silvertown Lubricants
Yorkshire Insurance Co

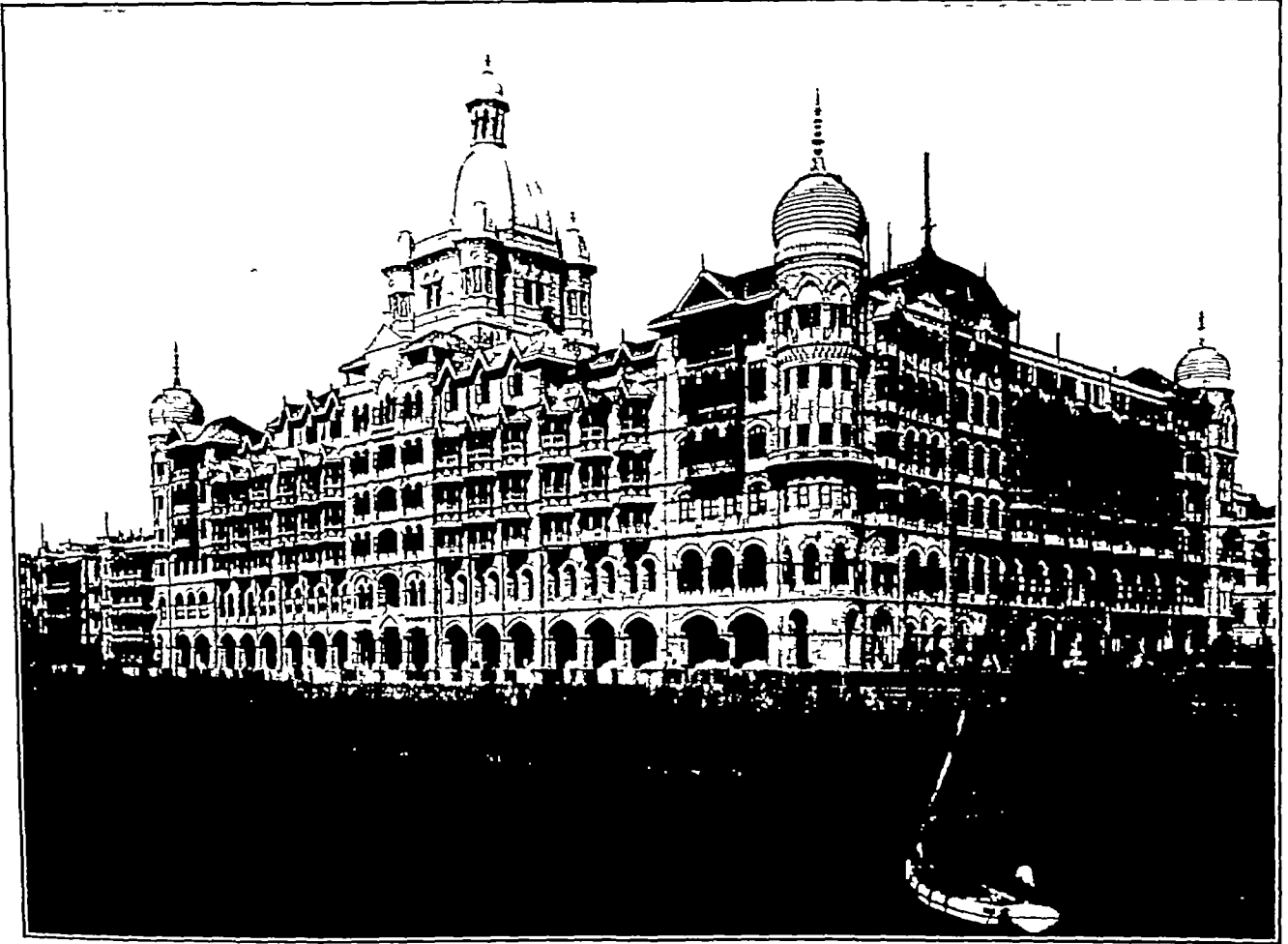
THE INDIAN HOTELS COMPANY, LTD.,
Proprietors of the Taj Mahal Hotel and Green's Hotel and Restaurant

THERE is no hotel in India through which more people pass than the Taj Mahal, which is so noteworthy an institution of Bombay, the Gateway of India. The mail steamers arrive weekly from England bringing people for all parts of the country, and most of the latter gravitate, of course, to the Taj Mahal Hotel, so that on Friday nights, and during week-ends especially, the great caravansary is the busiest and gayest place in the

highly-skilled European chefs, and nothing is lacking there that can contribute to the excellence of the meals and the way they are served.

Conterminous with the table d'hôte dining-room is a very popular grill-room, providing an exceedingly wide range of the highest attainments of culinary art.

The position of the Taj Mahal is exceptionally advantageous and delightful. The great building,



TAJ MAHAL HOTEL.

Indian Empire. In its extensive balconies and reception rooms are to be seen notabilities in every walk of life. The Taj is a place of music and brightness, of spacious perspective and elaborate minutiae. Essentially cosmopolitan, it caters to every requirement in accommodation, service, and supply. It is probably the greatest dancing place east of Suez. The former ballroom is now merged into the reading room, and the dinner dances are held in the centre of the great dining room, the nicely appointed tables being arranged along the sides, and the orchestra ensconced on a dais at one end. The scenes in that impressive hall on Tuesday and Friday nights are unsurpassed for brilliance in any other hotel in India. The cuisine is first-class both as regards quality and variety. The great kitchens are under the supervision of

which is only a few yards from the sea, was opened in 1904, gives employment to about 1,000 persons, and occupies an area of 10,776 square yards. It is five storeys high, and its electric passenger lifts are certainly the busiest in Bombay. The apartments comprise 30 private suites and 350 double and single rooms, all fitted with electric lights, fans, bells, and clocks. The one occupied by the writer on the fourth floor commanded one of the finest and most interesting views he has ever had in the many hotels in which he has sojourned in all parts of the world. It overlooked the wonderful panorama of the harbour with its islands and its varied shipping. The scene in the evenings beneath his windows was most impressive, comprising as it did the Apollo Bunder waterfront with its promontory gaily dressed throngs and

parked motor cars, the beautiful sarees of the Parsi ladies especially, in all the colours of the rainbow, being particularly noteworthy.

The Taj Mahal Hotel is a self-contained little world in itself, for it has its own railway booking offices, post and telegraph offices, a branch of Thomas Cook and Sons, aerated water factory, steam laundry, etc., and along its ground corridors are shops of booksellers, tailors, ladies' and gentlemen's outfitters, jewellers and curio merchants, chemists and druggists, hair-dressing saloons, etc. In its spacious billiard room are six tables, and on the ground floor are a confectionery, café, and an American bar.

GANNON, DUNKERLEY and CO., LTD., Engineers and Contractors, Chartered Bank Building

In every department of business activity conditions have changed very greatly during recent years. New means and methods have revolutionised old-time standards, and the necessities created by modern competition have altered entirely many of the ideals and traditions to which aspiring efforts were formerly directed. Many modern inventions and materials which have quite changed the work of builders and civil engineers were unknown even when the founders of the business of Messrs Gannon, Dunkerley and Co., Ltd., began operating in 1895. Bombay at that time was very different from what it has now become, and a comparison between the work which the firm were then doing and what they have since performed and are now engaged upon, as well as the means employed by them in that connection, affords many striking illustrations of the continual evolution towards the superlative which is at the back of all human activity. The range over which the firm's activities extend is exceedingly comprehensive. As engineers and contractors they are prepared to undertake the largest contracts for the construction of all kinds of buildings, railways, main drainage and sewage, sewage disposal, sanitary installations, hot water schemes, water supply, etc. Amongst the many important contracts which they have carried through very successfully are the sections of the following new railways for the South Indian Railway: Dindigul-Pollachi, Madurai-Bodenakanur and Trichinopoly-Manamadurai, for the M. and S. M. Railway, Guduvadi-Bhimavaram, Niddadavolu Railway, also the Adyar Bridge, Madras, for the S. I. Railway, bridge over the Khansabih Canal, South Arcot Division, the new jail for the P. W. D. Vellore, Madras, military barracks and married quarters stores, etc., Secunderabad and Poona, Imperial Bank, Tuticorin, Theosophical Society Building, Bhavatski Lodge, Bombay, schools and barracks, Bhawanagar State, drainage, roads and water supply for the Bombay Municipality, and Bombay Development Department.

Messrs Gannon, Dunkerley and Co., Ltd. have, of course, a staff of expert engineers equal

Green's Hotel and Restaurant, beside the Taj Mahal, and facing the magnificent structure known as the Gateway of India, on the Apollo Bunder, also belongs to the Indian Hotels Co., Ltd. The rooms there are exceptionally commodious and comfortable, and the culinary fame of Green's extends afar. Every evening there is an excellent orchestra in the front garden of the establishment, and Saturday and Sunday nights at Green's, when there is dancing in the ballroom, are features of Bombay's gaiety.

The Indian Hotels Co., Ltd., was formed in 1902, and is a subsidiary of Messrs Tata Sons, Ltd.

to the skilful solution of the most difficult problems with which they may be confronted, and they supervise all the work and installations entrusted to the firm, whose business is operated in two main sections, viz., as engineers and contractors and as importers of machinery and yarn. They are probably the largest suppliers of spinning machinery in India, and are sole agents for

Tweedales & Smalley (1920), Ltd., Castleton, textile machinists

Thos. Holt, Ltd., Rochdale, textile machinists

Charles Cain, Son, & Greenwood, Halifax, card clothing manufacturers

The Textile Illuminating & Engineering Co., Ltd., Manchester, textile humidifiers

John Dixon & Sons, Ltd., Steeton, hobbin manufacturers

Edgar Handley & Bros., Bradford, leather belting manufacturers

Stork Bros., Engineering Works, Hengelo, Holland, steam engines, turbines, boilers, mill gears, cranes, pumps, etc.

R. Hartley, Ltd., Baxenden, makers of loom sundries

C. H. Haubold, A. G., Chemnitz (Saxony), dyeing, bleaching, finishing, etc., machinery

G. Dijkers & Co., Hengelo, Holland, valves, steam pumps, and boiler fittings

Independent Sprinklers, Ltd., London, automatic sprinkler installations

Henry Mills, Ltd., Tottington, Bury, makers of shuttles and all wooden articles

Adams Hydraulics, Ltd., Hydraulic Engineers, York

Adamson, Ltd., Sanitary Engineers, Scotland, Tyne

Engert & Rolfe, Ltd., roofing felt and asphalt manufacturers, London

Teeside Bridge & Engineering Co., Ltd., Middlesbrough, bridge builders and constructional engineers

The founders of the firm were J. H. Dunkerley, who was in business under his own name, and Mr. H. Gannon, who was operating as H. Gannon and Co. In 1918 they amalgamated as Gannon, Dunkerley and Co. Mr. Dunkerley died in 1919, and in 1924 the firm was formed into a limited liability company with Mr. H. Gannon as managing director. The other directors are Messrs A. Henderson, J. W. Norris, and O. Owen. The telegraphic addresses are "Telegraph" and "Vitopus," and the codes used are the V.F.C. 5th and 6th editions, Lieber's, Benley's, and private.

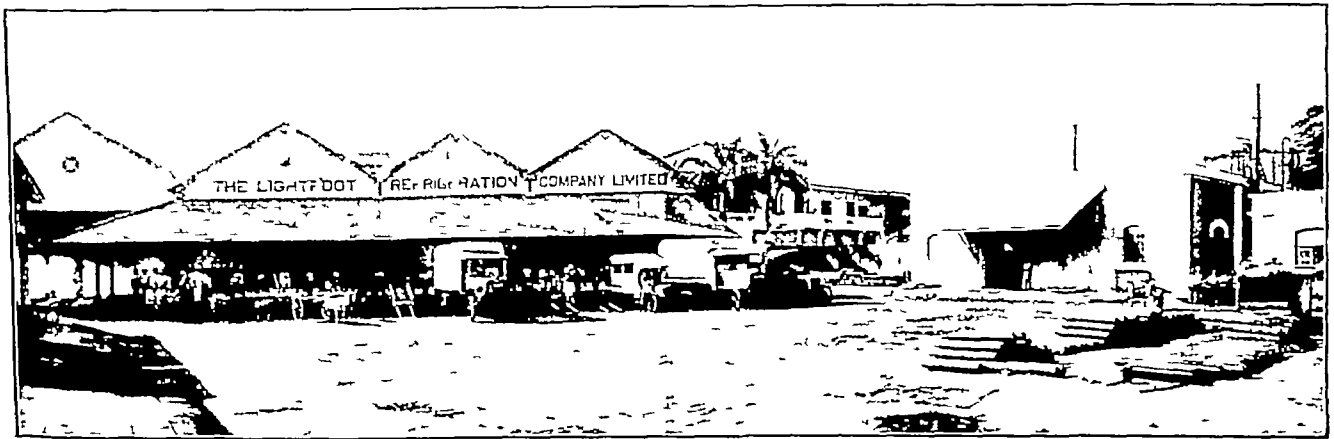
THE LIGHTFOOT REFRIGERATION COMPANY, LTD , Byculla Bridge, Byculla

No spot in Bombay is more exemplary of the past and the present than the area occupied by the Lightfoot Refrigeration Co , Ltd , close to Byculla Bridge. Not far away in Parel Road is the Bombay Bacteriological Laboratory, which was formerly Government House, and dates from the Portuguese occupation of the island. The stately old mansion, with its magnificent teak verandah pillars and great supporting beams of the same timber, forming the head offices for the Indian Empire of the company mentioned, has every indication of having also been built hundreds of years ago, and must be psychometrised with the impressions of the far-off times when conditions of life were utterly different from what they are to-day. If anyone who lived in the old mansion in the heyday of its splendour could visit it now, what bewilderment would be caused by the

divided into seven units, all of which are similar. In addition, there is the usual auxiliary gear, and a direct coupled electric generating set for producing current for the auxiliaries and the lighting of the factory, etc.

The ice-making tanks are all constructed of steel and are designed to suit tropical conditions and requirements.

Each division of the plate-ice tanks contains three "plates," on which the ice is formed and through which cold brine is circulated. On starting up a tank it is filled with cooled and filtered water from the storage tank, compressed air agitation is turned on, and cold brine circulated through the plates. The ice gradually forms on either side of the plates, the freezing process taking six to seven days to produce blocks of ice twelve inches thick. As the plates are arranged



PREMISES OF THE LIGHTFOOT REFRIGERATION CO, LTD, BYCULLA.

wonderful activities in the two busy factories that take up so much of the demesne which once was so beautifully merged in the then surrounding sylvan countryside! Ice, that delectable commodity for the tropics, and oxygen, the gas that forms one-third of the solid of the earth, one-fifth of the atmosphere, and eight-ninths by weight of water and is the chief supporting element of animal and vegetable life, these products are made there in great quantities, and contribute immensely to the vast complexity of requirements of modern Bombay.

The ice factory is the largest in India. When built in 1912 it had a manufacturing capacity of fifty tons of ice daily, but it has since been so enlarged and improved that its capacity is now 150 tons daily, with provision for a further 60 tons.

The ice is manufactured on the plate and cam system. The plate-ice plant is the only one of its kind in India. The water used is taken from the Bombay main supply and filtered in a quartz sand filter in the ice factory before being frozen. During the freezing process the water is agitated by means of compressed air so that clear ice is produced.

The machinery which is of the Lightfoot Refrigeration Co's own design and manufacture is

twenty-seven inches apart, the two sheets of ice are not allowed to join, and on completion of the freezing process three inches of water still remains between the ice blocks. Any impurities remaining in the water after filtration are kept in suspension by the air agitation and not frozen in the blocks. The cold water remaining in the tanks after the blocks have been withdrawn is drained into a sump, from which it is pumped into the condenser tray. The tanks are then thoroughly cleaned before being filled for freezing.

From this it will be seen that every precaution is taken that the ice produced by the company's plant is of the highest possible standard of purity.

Over each of the ice tanks an electrically driven crane is provided, by means of which the blocks, measuring approximately 18ft 6in by 9ft by 12in thick, and weighing about five tons, are lifted from the tanks, carried to the delivery end of the building and placed on electrically driven tipping tables, by means of which the blocks are transferred from the vertical to the horizontal position. The plates of ice are cut into blocks of suitable sizes for distribution and are delivered either on to the loading verandah if required for immediate delivery or else placed in the adjoining ice store.

It may be of interest to state that at the time when troops were being sent from India to Europe the company were asked to freeze large quantities of meat for provisioning the transports for the voyage. Although the plant was in no way designed for this purpose, a number of the ice tanks were adapted, and several hundred tons of meat was frozen with most satisfactory results.

At the time the factory was erected it was not possible to obtain electric power for driving the plant, and, therefore, Diesel engines were installed. Owing to extensions of the Latro Hydro-Electric Power Supply Co's plant, the Diesel engines have been replaced by electric motors.

The oxygen factory was erected in the autumn of 1914. Its plant, which is in duplicate, is capable of meeting all the requirements of the district for the next few years.

For distribution the oxygen gas is drawn from the gas holder and compressed by means of a two-stage water cooled compressor into steel cylinders at 120 atmospheric pressure. The steel cylinders are of various capacities to meet all requirements. Those of 200 and 100 cubic feet of free oxygen capacity are suitable for industrial purposes, such as metal cutting and welding, whilst smaller cylinders of forty, twenty, and ten cubic feet capacity are of convenient size for lime-light and medical purposes.

All the company's cylinders are made in accordance with Government requirements, and are annealed and tested at regular intervals, for which purpose the factory is equipped with a special furnace and testing apparatus. Testing and annealing marks and dates are stamped upon each cylinder, forming a permanent record of the life of each cylinder.

Oxygen is used now in all the up-to-date engineering and railway workshops for welding and metal cutting, and its applications are very numerous. Steel plates, bars and sections can be welded, wastage on steel plates, etc., can be made good, new metal being welded in and patches done away with. Wherever possible all urgent ship repairs are very much expedited by the use of either the cutting or the welding blowpipes. Broken castings can be repaired, rivets can be burnt out without damaging the rivet holes, and any cutting away of plates can be executed by the Universal Cutting Blowpipe. Cutting heavy sections up to eighteen inches of metal can be carried out by the company's specially constructed machine cutter.

For medical purposes the supply of oxygen gas of high purity has proved most valuable, and considerable use has been made of it during various epidemics, resulting in the saving of many lives.

The company have recently started to put on the market liquid oxygen as an explosive for blasting purposes. The liquid oxygen is put up in cellulose cartridges, and these are much safer and cheaper than any other blasting materials.

The head office of the Lightfoot Refrigeration Co., Ltd., is at 35, Queen Victoria Street, London, E.C.1. They have also factories at Birmingham, Brighton, Hastings, Tunbridge Wells, Eastbourne, Bedford, Calcutta, Lahore, and Colombo. The company manufacture and install ice-making machinery and refrigerating plants of every description. Their machinery agents in India are Messrs Greaves, Cotton and Co., Ltd., Bombay, and they have the advantage of being able to sell from the models of their plant actually in operation. The general manager for India and Ceylon is Mr W. Bird. The telegraphic address is "Lightfoot" for all branches.

MILLARS' TIMBER AND TRADING COMPANY, LTD., Commerce House, Currumbhoy Road, Ballard Estate

In Bombay are the headquarters for India of numerous large well-known firms with connections throughout the world. Among them are Messrs Millars' Timber and Trading Co., Ltd., whose head office for India is in Commerce Street, Currumbhoy Road, Ballard Estate, and they have branches at Calcutta, Karachi, Madras, and Secunderabad. The company transact a very large business in India in Jarrah railway sleepers, and in that connection have vast resources in timber concessions and saw-mills in various parts of the world. They are also large importers of teak and other timbers. The company, incorporated in England with a capital of £2,000,000, have their head office in Pinners Hall, Austin Friars, London, E.C., and are represented abroad as follows:

Millars' Timber and Trading Co., Ltd., St George's House, Perth, Western Australia.

Millars' West Australian Hardwoods Co., Ltd., Taranaki Street, Wellington, New Zealand.

Millars' West Australian Hardwoods Co., Ltd., Capetown.

Findlay Millar Timber Co., Manila.

Millars Trading and Timber Co., Ltd., 280, Broadway, New York.

Messrs Millars' Timber and Trading Co., Ltd., have a subsidiary company in Millars' Machinery Co., Ltd., at whose Thorley Works, Bishops Stortford, are manufactured all kinds of machinery, such as asphalt plants, concrete mixers, pumps, etc. The Spares and Service Depot of Millars' Machinery Co., Ltd., is at Amberley Wharf, Amberley Road, Paddington, London, W.9.

The local director of Messrs Millars' Timber and Trading Co., Ltd., in India is Mr J. S. Brown and the manager is Mr Fane S. Cox. The telegraphic address is "Jarrah," and the codes used are the A B C 5th edition, Western Union, and private.

BRUNNER, MOND and CO (INDIA), LTD., Manufacturers of Chemicals, Cook's Building, Hornby Road

An article on this company will be found on pages 70 and 71.

THE MAWSON-VERNON COMPANY, LTD ,
Constructional and Sanitary Engineers, Vulcan House, Nicol Road, Ballard Estate.

THE MAWSON-VERNON Co , LTD , was established in 1919 at the time of the greatest trade boom in the world's history, but, unlike many firms with great ambitions who were engulfed in the reaction and depression that began soon afterwards, the

Lightfoot Refrigeration Co , Ltd
 Mather & Platt
 Richardson & Cruddas
 Royal Insurance Co , Ltd
 The Times of India
 Freemasons' Hall

Mills

Alexandra Mills
 Apollo Mills
 Bradbury Mill
 Dadr Woollen Mills
 Edward Sassoon Mills
 Imperial Mill
 Jacob Sassoon Mill
 Kastoorchand Mills
 Kohinoor Mills
 Mahim Dye Works
 Meyer Sassoon Mill
 Planet Mills
 Rachel Sassoon Mills
 Wallace Flour Mills
 Shapurji Broacha Mills

Railways

Bombay Baroda & Central India Railway
 Great Indian Peninsula Railway

AHMEDABAD

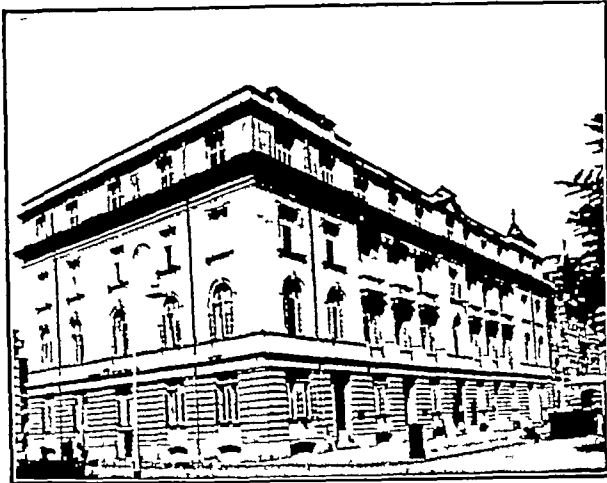
Jubilee Spinning & Weaving Mills
 Calico Mills

AMBERNATH

Western India Match Factory

CALCUTTA

Lightfoot Refrigeration Co's Factory



VULCAN HOUSE, BOMBAY,
 Containing Offices of
THE MAWSON-VERNON CO , LTD

company in question have made steady progress and are making their influence felt throughout India as constructional and sanitary engineers, specialists in reinforced concrete, and road specialising contractors This will be better realised by the work which they have carried out in connection with the following

BOMBAY

Banks

Hongkong & Shanghai Bank
 International Bank
 Mercantile Bank

Churches

Church Missionary Society
 St Peter's Church, Mazagon

Clubs

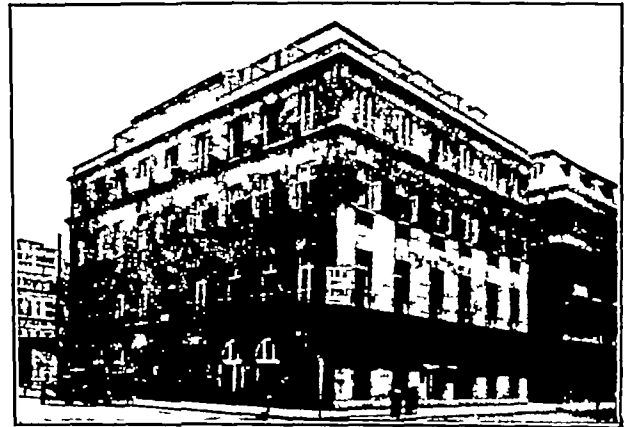
Commercial Gymkhana
 Orient Club, Chowpatty
 Yacht Club

Domestic Buildings

Arthur House, Appollo Bunder
 Percival House, Kalyan
 Javar Mahal Palace, Nepean Sea Road
 Lansdowne House, Apollo Bunder
 Station Terrace, Lamington Road
 Victoria Lodge, Malabar Hill
 Wellesley House

Business Premises

Army & Navy Stores
 Asiatic Petroleum Co (India), Ltd
 Back Bay Swimming Baths
 Ballard Pier, Plot No 24
 B E S & T Co Ltd
 Bombay Swadeshi Co-operative Stores
 Brady & Co, Ltd
 Brathwaite & Co Engineers, Ltd
 British & Foreign Bible Society
 Greaves Cotton & Co Ltd
 Howard & Bullough
 Japan Cotton Trading Co



EXCHANGE BUILDING, BOMBAY,
 Erected by
THE MAWSON-VERNON CO., LTD

DELHI

P W D , Asphaltting of Roads

KAPADWANJ

Elevated Surface Reservoir for the Sanitary Engineer to the Government of Bombay, Poona

KHANDALLA

St Peter's Girls' High School

LAHORE

Lightfoot Refrigeration Co's Factory

GWALIOR STATE

Public Works Department Water Scheme

MAHABLESHWAR

Government House (Hot Water Installation)

MELHANA

Elevated Surface Reservoir for the Baroda State Government

POONA

Yeravada Water Tower for P W D Poona
 Khadakwasli Siphon Spillway

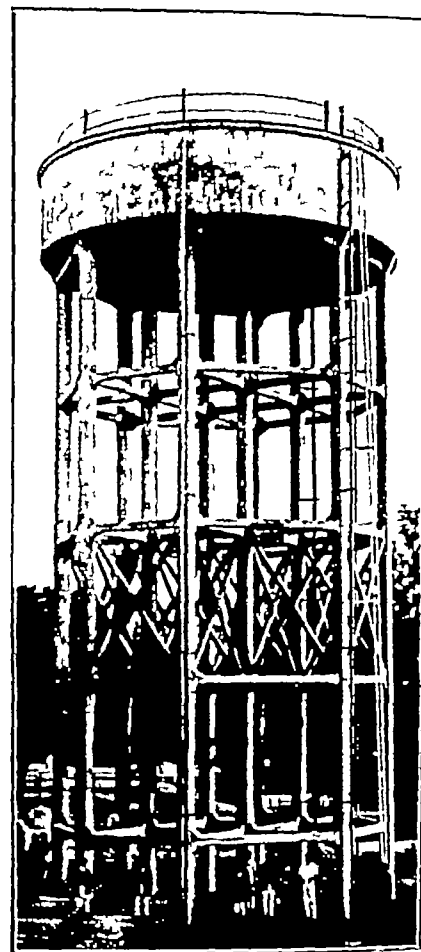
The Mawson-Vernon Co, Ltd, have all modern facilities and equipments for their very comprehensive activities, and employ in all their departments experts, each specialising in his particular job. In the construction of water-tanks of all sizes, for instance, they are unsurpassed, and are, at the time of writing, engaged in the design of one at Nagpur, which will have a capacity of 500,000 gallons, and will be the largest of its kind in India.



Road work done by The Mawson Vernon Co, Ltd, at the premises of The Lightfoot Refrigeration Co, Ltd, Bombay

The governing directors of the company are Mr J Alexander, B Sc, A M I C E, M I E, and Mr J F Vella.

The company are sole agents for the "Elephant" glazed and "Elephant" patent flooring tiles. They are contractors to the various Public Works Departments and Indian Native States Public Works Departments, the G I P Railway, etc. Their telegraphic address is "Modeng," Bombay, and the codes used are the A B C 5th and 6th editions and Bentley's.



MEHSANA WATER TANK, GUJRAT,
Erected by
THE MAWSON VERNON CO, LTD

JAMES FINLAY and CO, LTD.,

General Merchants and Commission Agents, Chartered Bank Building, Esplanade Road

No firm in India, or indeed in the British Empire, has a longer association with the cotton trade than Messrs James Finlay and Co, Ltd. As indicated in their history on page 60, they have been very influentially connected with that trade since 1798, and have played a prominent part in the development of British commerce and industry. They have the distinction of being the first Scottish firm to open direct mercantile connections between India and the United Kingdom. Their first branch in India was established in 1816 at Bombay under the style of Finlay, Muir and Co, which was continued until 1909, when the present designation was assumed on the formation of the firm into a limited liability company.

At Bombay Messrs James Finlay and Co, Ltd, control the Finlay Mills, Swan Mills, and the Gold Mohur Mills, which give employment to about 5,000 persons. The Finlay Mills were the first cotton mills in India to be driven by electrical power. Messrs James Finlay and Co, Ltd, are large importers of piece-goods and other merchandise and importers of sugar. They were amongst

the pioneers who built up the great trade in Bombay in the exportation of pearls from the Persian Gulf.

The Bombay branch controls the branch at Karachi. At Bombay the firm are agents for the following:

- The Finlay Mills, Ltd
- Swan Mills, Ltd
- The Gold Mohur Mills, Ltd
- Clan Line of Steamers, Ltd
- Ellerman's Wilsor Line, Ltd
- Central Provinces Manganese Ore Co, Ltd
- London & Provincial Marine and General Insurance Co, Ltd
- The National Insurance Co of Great Britain, Ltd
- Kobe Marine Transport & Fire Insurance Co, Ltd
- Insurance Company of North America
- Mitsubishi Marine & Fire Insurance Co, Ltd, of Tokyo
- The Sun Insurance Office
- The Tokio Marine & Fire Insurance Co, Ltd
- Automobile Insurance Co of Hartford, Conn
- Acetona Insurance Co, Hartford, Conn
- The Osaka Marine & Fire Insurance Co, Ltd
- The Province Washington Insurance Co
- Platt, Fuller, & Co
- Talbot Bird, & Co

F and C OSLER, LTD , Electrical Engineers and Contractors, Hornby Road.

MESSRS F AND C OSLER, LTD , are among the pioneers of electrical supplies in India, where they have greatly assisted in the development of electricity, the entire vast country being dotted with electric light, power, pumping, telephone, heating and refrigerating plants which have been installed by them. As indicated in the reference on page 86 to their senior Indian office at Calcutta, the firm were established at Birmingham more than a hundred years ago. The Bombay branch was opened on the introduction of electricity into India, and has become one of the most influential concerns of its kind in the West of India. Its comprehensive stock exemplifies the wide range of electricity for illumination as well as for motive power. The firm are specialists in the manufacture of light fittings both in glass and metal, and the large selection of designs to be seen in their showrooms bears the unmistakable impress of the artist and the craftsman, while nearly every palace in India testifies to the beauty and magnificence of their lighting effects.

From the first they also concentrated on the production of a fan which for both mechanical and æsthetic merit would be a complement to their productions for lighting purposes, and that they have succeeded in their ambition is evidenced by the Osler fan, which has no rivals.

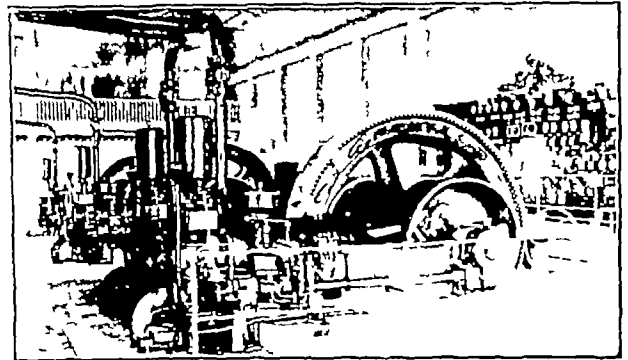
The Bombay branch has carried through many important undertakings for Governments and various public bodies as well as for large business houses and individuals. An important hydro-electric scheme was very successfully carried through by it for the Government of Afghanistan, and one of its most recent contracts was the entire installation of the electric power and illumination plant for the town of Jamnagar, in Kathiawar.

There is nothing pertaining to the wide and growing domain of electricity which Messrs

F and C Osler, Ltd , are not prepared to carry through to the utmost satisfaction of everyone concerned.

The comprehensive activities of the firm may be indicated by the following list of their agencies:

Rees Roturbo centrifugal pumps, condensers, motors, and dynamos
W T Glover & Co's wires and cables
Metropolitan Vicker's "Cosmos" vacuum and gas-filled lamps



Electric Plant in the Power House at Jamnagar, supplied and installed by F. and C Osler Ltd.

British Sangamo Co's electricity meters
Wardle Engineering Co's watertight lanterns and reflector fittings
R A Evans, Ltd , electric lifts for passengers and goods
Leyland Roturbo portable fire engines
Kohler Automatic Co's automatic lighting plants
Hig Electric Ventilating Co's ventilating fans and blowers
Walter Macfarlane & Co's ornamental cast and wrought ironwork
Relay Automatic Telephone Co's automatic telephones
Chloride Electrical Storage Co's Exide batteries
Overseas Motor Service Corporation's Delco Remv motor car parts and A C speedometers
Smith & Co's Wotton hand lanterns

E D SASSOON and CO , LTD , Merchants, E D Sassoon Building, Ballard Estate

Among the many Jewish families that have contributed to the development and prestige of British commerce and industry none has been more prominent and influential in that respect in the East than the Sassoons, whose wealth and achievements are in keeping with the glamour and romance of the ancient city of Bagdad, where Mr David Sassoon, the founder of that celebrated house, was born in 1792. His father was a wealthy Mesopotamian merchant, who was for many years State Treasurer to the Turkish Government of Bagdad and was known as "Nasi (Prince) of the Capitivity." David Sassoon was engaged in banking at Bagdad until the year 1822, when, owing to an outbreak of plague, he removed to Basra and subsequently to Bushire. He visited Bombay in the course of business in 1832 and having decided to remain there, he made a home for his family and established the firm bearing his name opening

branches at Calcutta, Shanghai, Canton, and Hongkong. Shrewd in business, while noted for integrity, David Sassoon made his mark in Bombay, and the great success which he afterwards achieved was attributed by him mainly to the assistance which he received from his sons, and to his strict observance of the old Jewish law relating to tithe, which required a man to devote a tenth portion of his income to charitable purposes.

He was a great benefactor to the poor, and was well-known for his benevolence to Jews in Turkey, China, Persia, and India. In Bombay he built and munificently endowed the Talmud Torah School and at Poona, his summer residence, he bore the cost of the construction of a very handsome synagogue. He was a most liberal subscriber to Sailors Homes in Bombay and Hongkong, to famine funds, funds for widows and orphans of

those who were killed during the Indian Mutiny of 1857, and to the Lancashire Relief Fund. He was an accomplished linguist, speaking Arabic, Persian, Turkish, and Hindustani, and evincing a desire to promote education, he was a warm supporter of an institution for teaching English, Arabic, and Hebrew to the rising generation. Shortly before his death, at Bombay, in 1864, he set apart a large sum of money for the erection in that city of a Mechanics' Institute and Library which is called by his name, but perhaps one of the most important of his gifts was the donation of the Sassoon Reformatory and Industrial School for juvenile offenders. An asylum for infirm persons and general hospital for individuals of all castes and creeds were erected by him at Poona, and his last gift to the public was a statue of Prince Albert.

In appreciation of his philanthropy the citizens of Bombay erected a marble bust of David Sassoon in the Victoria and Albert Museum in Parel Road, Byculla, to which he had presented an illuminated clock-tower, and on December 13, 1864, a special meeting of his late fellow-citizens was held, under the chairmanship of the Governor, at which it was resolved to erect a statue to his memory in the Sassoon Mechanics' Institute.

One of Mr David Sassoon's sons, Mr Elias David Sassoon, founded in 1878 the firm of E D Sassoon and Co., an offshoot of the parent concern. Messrs E D Sassoon and Co. have become one of the largest houses in the Orient, and uphold a great proportion of the cotton industry of Bombay.

Mr Elias David Sassoon, who died in 1880, was succeeded in the business by his three sons—

Jacob, who became Sir Jacob Sassoon, Bart., Edward Sassoon, and Meyer Sassoon. These have all passed away. The firm was formed into a limited liability company in 1921, and the directors are Sir Victor Sassoon, Bart., Capt R. E. Sassoon, Mr A. J. Raymond and his nephew, Mr Albert Raymond.

The business of Messrs E D Sassoon and Co., Ltd., is the largest of the Sassoon undertakings. The firm are managing agents of

The E D Sassoon United Mills, Ltd., comprising
Alexandria Mill
E D Sassoon Mills
Rachiel Sassoon Mill
Jacob Sassoon Mill
E D S Turkey Red Dye Works

The Edward Sassoon Mills, Ltd.
The Meyer Sassoon Mills, Ltd.
The Apollo Mills, Ltd.
The Elphinstone Spinning & Weaving Mills Co., Ltd.
The David Mills Co., Ltd.
The Elphinstone Oil Mill
Ahmuty & Co., Ltd.
Raymond Woollen Mill

They are also agents for

Royal Exchange Assurance (Marine)
Holland British India Line
Atlas Assurance Co., Ltd.
Eastern Chemical Co., Ltd.
American Foreign Insurance Association (claim settling agents)

St Paul's Fire & Marine Insurance Co., Ltd.

Messrs E D Sassoon and Co., Ltd., operate very extensively as bankers and general merchants. They are very influentially established at Calcutta, Karachi, Rangoon, Hongkong, Shanghai, Manchester, and in London at 17, St Helen's Place, E.C. The E D Sassoon Building in Dougall Road, Ballard Estate, which is their own property, was erected in 1921.

H J FOSTER and CO., LTD., Import and Export Merchants, Advertising Agents, Exchange Buildings, Sprott Road, Ballard Estate

BUSINESS is not always a question of money making. Financial profit is, of course, the motive force behind all trade, and must continue so while the inhabitants of this material world retain their present characteristics. Nevertheless, the complexities and ramifications of commerce and industry are continually increasing as the result of the unceasing application of knowledge and skill towards the prevention and alleviation of pain and illness and the enhancement of physical well-being.

An interesting and impressive example in the latter connection is afforded by the business of Messrs H J Foster and Co., Ltd., a business which is exerting by its service and supplies a vast amount of good that cannot be better appreciated than by the 27,000 medical men on the firm's mailing list, who know full well the efficacy of the famous and valuable commodities which, through Messrs H J Foster and Co., Ltd., are growing in popular demand all over the Indian Empire and elsewhere. Messrs H J Foster and Co., Ltd., are not concerned with hardware nor machinery, they are not interested in piece-goods nor alcoholic liquors, but they are enterprisingly concerned with

pharmaceutical goods, provisions, and toilet requisites. They are, for instance, sole agents in India for the renowned products of the Glaxo laboratories. The Glaxo milk powder is just as rich in vitamins as the natural fresh liquid from which it is converted in less than three seconds. No other dried milk is prepared under the same strict scientific control and from the milk of cattle fed on fresh green pasture throughout the year. To further ensure that Glaxo should reach the user in perfect condition, it is packed for the tropics in special tins, which exclude all air. In this way the finest milk in the world—that of the prize dairy herds of New Zealand—is available in India, and all the hidden dangers which lurk in the liquid milk of the latter country are avoided. Apart, however, from ensuring this perfect purity and cleanliness, the Glaxo process produces a change in the physical character of the casein, causing it to form a light flocculent curd when in contact with the gastric juices, in place of the hard, dense, coherent curd formed from ordinary cows' milk. This property is an exceedingly valuable one, in that the digestibility of Glaxo is much greater than

that of ordinary or condensed milk—a matter of first importance both in infant feeding and in those gastric complaints to which many persons in the tropics are prone

Another of the remarkable products from the Glaxo laboratories is Ostelin, which is a preparation of the active medicinal portion of cod-liver oil, separated from the fatty constituents of the oil, and presenting Vitamin D, the factor which gives to cod-liver oil its therapeutic value, in very high concentration. Four hundred gallons of cod-liver oil yield but one pint of Ostelin, a quart of which is worth £4,000.

Ostelin enables the tonic stimulating properties of vitamin D to be obtained by patients of all ages without any of the unpleasant effects which so often attend the use of cod-liver oil. The therapeutic value of Vitamin D is due to its power of promoting the absorption of calcium and phosphorus, in its absence, however adequate may be the supply of these elements in the dietary, the organism will fail to derive benefit from their digestion, for they will be passed through the system without being absorbed into the blood serum and tissues.

In the adult many nervous disorders, especially that commonly known as tropical neurasthenia, are due to a deficiency of phosphorus in the system, and this ultimately to a deficiency of the vitamin

which promotes its absorption. The course of wasting diseases, especially of pre-tubercular conditions, is also greatly influenced by the stimulus which the administration of adequate supplies of Vitamin D gives to the absorption of calcium and phosphorus.

Messrs H J Foster and Co, Ltd, are agents for many other noteworthy things, including Glaxo, Cocogem, Mackintosh's Toffee, Urodonal, Vichy Agreeable Shave, Zee-Kol, Semprolin Carmel, Delletrez Perfumes, Vivaudou Perfumes, Flyosan Bismuthated Magnesia, etc.

They started their business in 1911, and were formed into a limited liability company in 1924. Their headquarters are at Bombay, and they have branches at Calcutta, Madras, Lahore, Karachi, Bangkok, Singapore, and Penang.

Messrs H J Foster and Co, Ltd, operate also very ably as general advertising agents and contractors, and draw up all kinds of publicity schemes for newspapers, etc. The work of the experts in this branch of the business is under the supervision of the Managing Director of the company, Mr E W Foster, who has had considerable experience of advertising in Great Britain and elsewhere. The firm's telegraphic address is "Hustlers" for both Bombay and Calcutta, and their codes are Bentley's and the A B C 5th and 6th editions.

HERBERT, SON and CO, LTD, 11-13, Elphinstone Circle, Fort

In former times before the introduction of modern inventions life in India and elsewhere in the East must have been accompanied by many limitations and deprivations such as people of to-day, more fortunate than their predecessors, are not called upon to undergo. By reason of the achievements of science and industry, as well as commercial enterprise and ability, residents there, so far as their commissariat is concerned, are infinitely better off than were the early settlers, whose supplies were very limited in comparison with the multiplicity of preserved foods and liquors that have since become necessities throughout the world. This is excellently demonstrated by the great variety of groceries and provisions, wines and spirits, confectionery, etc., sustaining the large wholesale business of Messrs Herbert, Son and Co, Ltd. Even since their business was established in 1898 vast improvements have been effected in food production, and an inspection of the innumerable comestibles supplied by them, put up in receptacles that are, in many cases, useful acquisitions without their delicious contents, render it difficult to conceive further progress in the same connection possible.

In the firm's godowns for wines and spirits occupying an area of about 6,000 square feet in Custom House Road, is a stock that includes very many of the finest brands on the market.

Messrs Herbert, Son and Co, Ltd are also very large wholesale suppliers of cigarettes, patent

medicines, soaps, and household requisites. Insurance is an important department of their activities, and they are agents for the General Accident Fire and Life Assurance Corporation, Ltd, Indian Guarantee and General Insurance Co, Ltd, and the Empire of India Life Assurance Co, Ltd.

The ability with which the business is directed is further manifested by the advertising department, which deals with all classes of advertising—newspapers, railways, trams, buses, etc. Amongst its resources is an addressograph equipment containing upwards of 10,000 addresses of dealers, clubs, messes, hotels, restaurants, Indian chiefs, senior civil servants, railway officers, business houses, etc., which is of the greatest value for circularising purposes.

The firm was formed in 1923 into a limited liability company, and operates in conjunction with Herbert, Son and Co (Calcutta), Ltd, 11A, Radha Bazar Lane, Calcutta, both companies being under the same management. The managing directors are Messrs L W A Herbert and G M Rose, the other directors are Messrs R E Harrington, L Blunt, and R Preston. The director at Calcutta is Mr W Harold Chate.

Mr Herbert is an insurance expert of great experience, and was with the General Accident Fire and Life Insurance Co for twenty years. He is a director of the Indian Guarantee and General Insurance Co, Ltd, and started the Mill Owners'

Mutual Insurance Association for covering liability under the Indian Workmen's Compensation Act of 1914

At the end of 1926 Messrs Herbert, Son and Co, Ltd, acquired the general merchandising business of Messrs H B McKerrow and Co, established in 1919

The telegraphic address of Messrs Herbert, Son and Co, Ltd, Bombay, and Herbert, Son and Co (Calcutta), Ltd, is "Herbertson," and the codes used are the A B C 5th edition and Bentley's. Both companies are agents for the following

WINES, SPIRITS, BEERS, CORDIALS, ETC

Whiskies

James Buchanan & Co Ltd (B C)

Hum Walker & Sons, Ltd (B)

Brandies

Jas Hennessy & Co (B)

Ade' Seward & Co (B)

George Alfred (C)

Ade' LXX (C)

Champagne

Ernest Iroo (B)

Beer, Cyder, etc

M B Foster & Sons Ltd (B C)

John Fowler & Co Ltd (B C)

Plowman Barrett & Co, Ltd (C)

Buiger Bran

Gin Schnapps

Wolfe's Schnapps (B C)

"Beefeater" Gins (B C)

Burrough's Plymouth Gin (B C)

French Wines

Ade', Seward & Co's "V D" Wines (B)

Italian Wines and Vermouth

Martini & Rossi (B)

Tonic Wine

Winox, Ltd (B)

Liqueurs

James Burrough, Ltd (B C)

Lime Juice Cordials, etc

L Rose & Co Ltd (B)

PROVISIONS, CONFECTIONERY, ETC

Biscuits

W & R Jacob & Co, Ltd (C)

Peak, Freyn & Co, Ltd (B)

Confectionery

Cadbury Bros, Ltd (B)

J S Fry & Sons, Ltd (B)

Edward Sharp & Sons Ltd (B C)

Fox's Glacier Mints (India)

James Marshall (India)

Lightbowns ("Grips" Pastilles) (India)

Marmalade and Preserves

James Robertson & Sons, Ltd (B)

Cheese

J H Lyssen (B C)

John A Hunter & Co (B C)

Essences

Stevenson & Howell, Ltd (B)

Hams, Bacon, etc

John A Hunter & Co, Ltd (B C)

Sausages, Potted Meats, etc

Thos Wall & Sons, Ltd (B C)

John A Hunter & Co, Ltd (B C)

Salt, Jelly, Crystals, etc

Cerebos, Ltd (B C)

Sauces, Pickles, etc

Holbrooks, Ltd (B C)

Sardines & Canned Goods

Angus Watson & Co, Ltd (C)

Trondhjen Canning & Export Co (B)

Canadian Fishing Co (B)

Tea, Coffee

The Amber Tips Tea Co, Ltd (B)

Invalid Foods

Chellund Foods Co (India)

CIGARETTES, PATENT MEDICINES, SOAPS and HOUSEHOLD REQUISITES

Boot Polish

The Nugget Boot Polish Co, Ltd (B C)

Cigarettes, Tobacco and Pipes

Abdulla & Co, Ltd (India)

Floor and Furniture Polish

The Nugget Polish Co, Ltd (Poliflor) (B C)

Insect Powder

Thomas Keating (India)

Patent Medicines

Ashton & Parsons (Phosferne) (India)

J T Davenport, Ltd (Dr Collis Browne's Chlorodyne) (B C)

B W Hum & Son, Ltd (Asthma Cure) (India)

Foster McClellan Co, Ltd (Doan's Preparations), (India)

Scott & Turner (Andrews Liver Salt) (C)

Cerebos, Ltd (Health Saline) (B)

Disinfectants

Milton (C)

Plate Powder

J Goddard & Sons (B C)

Soaps, Toilet Preparations, etc

A & F Peirs, Ltd (B)

Toilet Preparations

International Iclma Trading Co Ltd (C)

NOTE—(B) signifies agency for Bombay territory

(C) signifies agency for Calcutta territory

(B C) signifies agency for Bombay and Calcutta territories

(India) signifies agency for all India

LANGLEY and CO, Cotton Brokers and Merchants, Oriental Buildings, Hornby Road.

THE prominent and influential position occupied by Messrs Langley and Co as cotton brokers and merchants is indicated by the fact that in 1926 they imported the largest quantity of American cotton into India, viz, 100,000 bales. They are extensive exporters of cotton to Europe and the Far East. Throughout India their influence in the cotton trade is ubiquitous, and they have buying agents in all the principal centres of the industry in that country.

The business of Messrs Langley and Co was started in 1915 by Mr G E D Langley, who was joined in partnership in 1920 by Mr G Boyagis. The latter is one of the most experienced authorities in the cotton trade in India. He joined the firm of Ralli Bros in Liverpool, and in 1903 pro-

ceeded to their Bombay branch, where he remained for seventeen years, and was head of their cotton department. Mr Boyagis resigned from that position in order to join Mr Langley, and is a director of the Indian Cotton Association. The other partners are Messrs A H Rhodes and S D Chard, who likewise have had long experience of the cotton trade. Messrs Langley and Co are Associate Members of the Liverpool Cotton Association. They are agents for the Palatine Insurance Co, Ltd, and have a branch at Calcutta, Karachi, and Cawnpore. Their telegraphic address is "Langlet," and the codes used by them are Bentley's, Meyer's 39 and 40th editions, A B C 5th and 6th editions.

THE ORIENTAL GOVERNMENT SECURITY LIFE ASSURANCE COMPANY, LTD , Oriental Building, Esplanade Road

THE ORIENTAL GOVERNMENT SECURITY LIFE ASSURANCE Co., LTD, was founded in 1874 by Mr Duncan M Slater as the first purely Indian life assurance company. It was started in a small room at No 9, Elphinstone Circle, Bombay, for which a rent of Rs 40 per month was paid, and Mr Slater had one assistant. Nevertheless he secured the support of some local men of great wealth and influence, and the undertaking attained rapid and successful development.

One primary object of the company was to insure Indian lives at the same rates as those which were exacted for the assurance of Europeans, and in this respect the "Oriental" is the pioneer of pioneers. Having regard as a first consideration to the interests of policyholders, certain definite and original rules were formulated to remedy defects thought to exist in the methods of European companies already at work in the country. Thus, in addition to providing policyholders with a controlling interest, provisions were made in the constitution of the company strictly prohibiting amalgamations, and furnishing the highest order of security for its engagements, giving a fixed monetary value for every premium paid, by investing 80 per cent thereof in Government securities in trust with the Official Trustee of Bombay for policyholders as their sole property to meet payment of claims, by shareholders and policyholders appointing their own trustees, auditors, and consulting actuary to protect their respective interests, by funds being invested in Government securities and securities authorised for the investment of trust funds only, and remaining in India, so as to afford absolute safety to both shareholders and policyholders.

A company founded on such a basis, and keeping ever before it, as did the "Oriental," the constant ideal of economical management was, given the absence of any untoward circumstances, bound to succeed, and the progress made by the "Oriental" in the first fifty years of its experience is in itself a remarkable justification of the lofty principles which animated its original directors and manager, and a thorough refutation of the lugubrious prophecies promulgated at its inception.

The capital of the new company was fixed at a sum of Rs 10,00,000, and was subscribed to the extent of Rs 6,00,000 in three thousand shares of Rs 200 each. The amount of capital called up was only Rs 1,50,000. It was held to be a fallacy that a large paid-up capital is essential in floating a concern of the kind. The shares, now Rs 100 paid up, stand in the market to-day at over Rs 2,000, and are practically unobtainable. This in itself constitutes a singularly effective appreciation by the Indian public of the skill and judgment with which the affairs of the "Oriental" are conducted.

The progress of the company is indicated by the following figures

A DECENNIAL RECORD OF PROGRESS

Year	No of Policies in force	Existing Assurance	Total Income	Total Assets
		Rs	Rs	Rs.
1886	6,658	2,04,87,450	9,40,724	24,73,120
1896	24,386	5,97,60,620	28,47,012	1,20,72,811
1906	48,147	9,45,63,407	48,84,536	2,84,76,155
1916	65,842	12,69,14,109	75,41,655	5,56,74,816
1926	112,210	23,73,70,325	1,45,82,551	7,74,93,727

Up to the time of writing the company has paid in claims more than ten crores of rupees.

The company has 18 branches and 6 chief agencies spread over India, Burma, and Ceylon. Its branches at Calcutta, Rangoon, Madras, Colombo, and Bangalore are housed in the company's own property, and the head-office building in Hornby Road is built on what is doubtless the best business site in Bombay. The hold which the Oriental has on the people of India can be gauged by the fact that in 1925 the company transacted over 36.4 per cent of the total new business completed by all Indian companies. Always progressive and with capable and economical management, it is not to be wondered at that the Oriental is to some degree what the Prudential is in Great Britain, nor is one surprised to read in the *Indian Life Assurance Year Book for 1926*, in the Introductory Note by the Government Actuary, that many of the life assurance companies in Western India have profited by the excellent lead given by the Oriental.

HAVERO TRADING COMPANY, LTD , Dyestuffs, Chemicals, Pharmaceutical Products, Photographic Material, etc , Havero House and Sudama House, Ballard Estate, and Canada Building, Hornby Road

Amongst the wonders of modern discovery are the products from coal tar. One of these, for instance, is aniline. When Sir W. H. Perkin succeeded in 1858 in producing from it the dyestuff to which the name of mauveine was given, the great development of the aniline dyes began, and their range now covers every shade of colour desired and every variety of fastness.

Aniline dyes and the allied alizarine vat and naphthol dyestuffs are nowadays universally em-

ploved, not only for textile fabrics, but also for leather papers, soaps, cosmetics, paints, and numerous other industrial products. Germany is the great home of the synthetic dyestuff industry and the leading firms engaged in it there, namely

Badische Anilin und Soda Fabrik, Ludwigshafen a Rh.
Farbwerke vorm Meister Lucius and Brüning
Hoechst a M.
Farbenfabriken vorm Friedr Bayer & Co, Leverkusen a Rh.
Leopold Cassella & Co, G m b H, Frankfurt a M.

Actiengesellschaft fuer Anilinfabrikation, Berlin
 Chemische Fabrik vorm Weiler ter Meer, Uerdingen
 a Rh
 Kalle & Co, A G, Bielefeld a Rh
 Farbwerk Muehlheim vorm A Leonhardt & Co,
 Muehlheim a M

amalgamated towards the end of 1925 in a single concern entitled

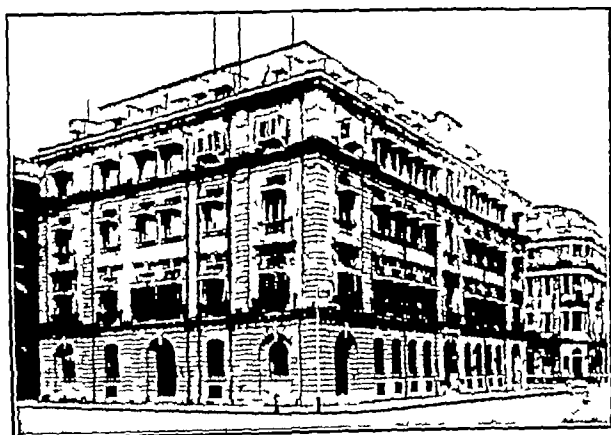
I G FARBENINDUSTRIE AKTIENGESELLSCHAFT,
 with a capital exceeding Mk 650 million

For the consolidation and better advancement of its trade in India, Burma, and Ceylon, where all the foregoing firms had been operating through various importers, the combined concern entered into an agreement with the Haverø Trading Co, Ltd, incorporated in Rotterdam, to be, from April, 1926, its sole importer for these countries. The goods handled by the Haverø Trading Co, Ltd, comprise, besides aniline dyes, a large range of chemicals, pharmaceutical products, synthetic perfumes, artificial silk, etc

The company's headquarters for India are at Bombay, where its Aniline Department is situated in the large four-storeyed building known as Haverø House, Ballard Estate, whereas the General and Photographic Departments are in Canada Building, Hornby Road. The Pharmaceutical Department is situated in Sudama House, Ballard Estate, which contains also the large

SCINDIA STEAM NAVIGATION COMPANY, LTD,
NAROTTAM MORARJEE and CO, Managing Agents, Sudama House, Ballard Estate

The first years after the cessation of the Great War were unparalleled in the world's history for the unprecedented boom in every branch of commerce and industry. The reaction from the years of terrible conflict found expression in new business undertakings in every land. India was no



SUDAMA HOUSE, BOMBAY,
 Headquarters of
SCINDIA STEAM NAVIGATION CO., LTD

exception thereto, and amongst the most prominent and ambitious of her sons was a young contractor, Mr Walchand Hirachand, who had already given impressive manifestation of his ability in Bombay and elsewhere. His swift enterprise and judgment were eloquently demonstrated when on returning

up-to-date and fully equipped Central Laboratory, under the management of several European experts

The company is also established at Calcutta, Delhi, and Madras, where, apart from its business with the mill industry, it specialises in the important bazaar trade and in educating the population in the benefits and values of the goods it is marketing with such enterprise and ability. The thoroughness with which it is operating may be gauged from the fact that, apart from its Central Laboratory in Bombay, well equipped laboratories, under European management, are kept up at the Madras and Calcutta branches. Continuous with the Dye-stuff Department of the Calcutta branch are the headquarters of the Pharmaceutical Department, under the management of a European expert, devoted to such famous products as those of Messrs Friedr Bayer and Co, Leverkusen, Germany (who gave aspirin to the world upwards of thirty years ago), as well as the renowned pharmaceutical products of Meister Lucius and Bruening, Hoechst, Germany, which have found such great popularity owing to their outstanding merit.

The telegraphic address of the Haverø Trading Co, Ltd, at Bombay is "Havaniline," and the codes used are Bentley's, A B C 5th and 6th editions, Rudolph Mosse, and Simplex.

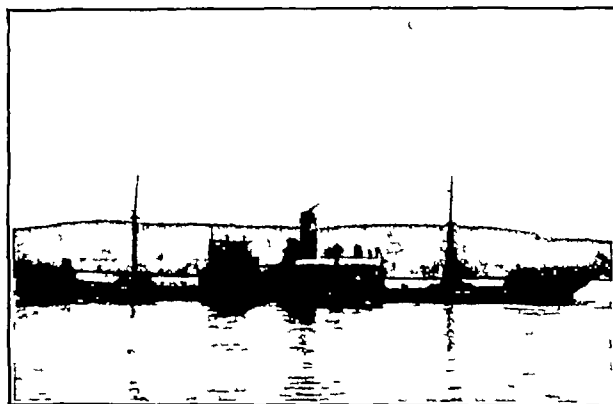
to the city from a visit up-country he was offered the purchase of the hospital steamship *Loyalty*, then lying at the docks. With characteristic promptitude and energy he at once proceeded from the Victoria Terminus to inspect the vessel, and was so impressed with the potentialities of the opportunity thus presented to him that he soon succeeded in interesting various prominent and influential Bombay gentlemen, including Mr (now Sir) Lalubhai Samaldas and Mr Narottam Morarjee, in the project of forming a new steamship company that would have as its nucleus the steamer in question. Thus was founded the Scindia Steam Navigation Co, Ltd, with a capital of four and a half crores of rupees, and with the firm of Narottam Morarjee and Co as managing agents.

Soon afterwards the s s *Loyalty* was converted into a passenger steamer, and sailed for England with a full complement of distinguished passengers, including Mr Narottam Morarjee and Mr Walchand Hirachand, who, on their arrival at their destination, bought for £1,000,000 the Palace Shipping Line, consisting of six steamers. Very great difficulty was experienced in the transference of its vessels to the Scindia Steam Navigation Co, Ltd, but eventually all the arrangements were satisfactorily settled by 1921, and the vessels then began to ply on the Indian coast. Their appearance there, however, led to immediate opposition by already established shipping interests. The rates of freight of the British India Steam

Navigation Co, Ltd, for instance, came down from Rs 18 to Rs 6 per ton, with the result that the new Indian company lost hundreds of thousands of rupees. A proposal was made by the British India Co practically to buy up the Scindia Co, and although some of the directors were inclined at one stage to consider the proposal on its merits, the courage and the far-sighted patriotism of Mr Walchand Hirachand, aided by the strenuous efforts of Mr Master, the manager, and supported by the opinion in the country that the acceptance of such a proposal would sound the death-knell of Indian shipping, were responsible for the rejection of the proposal. The Scindia Co had the wisdom to buy its own cargo and to give direct service to ports till then neglected by the British India Co. Mr Walchand Hirachand had the support of his colleagues in firmly withstanding the vigorous opposition of the British India Co against the Scindia Co, with the result that ultimately the contending companies decided to work in harmony on the coast. This was a great achievement for an Indian company, because all the previous efforts of Indians in that direction had been rendered futile by the strong and unfair fight which the foreign shipping companies had given them in Indian waters.

The patronage now received by the Scindia Co from the Indian shippers is so great that, in addition to the ten steamers of its own, it is also running four steamers on time charter, the total aggregate dead-weight capacity of the entire fleet amounting to about 102,620 tons. The company

maintains regular services from the ports in Burma to Ceylon and Bombay via coast ports, as well as a regular service from Calcutta to Karachi via all the intermediate ports, thus practically catering for all the ports on the coasts of India, Burma, and Ceylon. The company has branch offices at Calcutta, Karachi, Rangoon, Moulmein, Akyab,



SS. "JALABALA,"
SCINDIA STEAM NAVIGATION CO, LTD.

and also thirty agencies at all the principal ports of the Indian seaboard. The directors are Mr Narottam Morarjee (chairman), the Honourable Sir D E Wacha, Kt, Messrs Walchand Hirachand, Lalji Naranji, Hiralal Dayabhai Nana-vati, Revashanker Jagjivan Zaveri, and Sir Lalubhai Samaldas, Kt, C I E.

JAMES MACKINTOSH and CO, Ship Brokers and Steamship Agents, 16a, Elphinstone Circle, Fort

ONE of the best known and oldest firms in Elphinstone Circle is that of Messrs James Mackintosh and Co, whose business was established in the early portion of the nineteenth century by a Mr Blay, who was shortly afterwards joined in partnership by Mr James Mackintosh under the style of Blay and Mackintosh. Mr Blay retired about 1850, and Mr Mackintosh continued on his own account for some years until Mr Chubildas Lallubhai and subsequently Mr J R K Johnson were admitted into partnership, the firm being then designated James Mackintosh and Co. In 1887 Mr Mackintosh died, and Mr Kidd, arriving in Bombay from England in the latter part of the year to assist in the management of the business, became a partner on January 1st, 1892.

In 1887 Mr Johnson proceeded to London and opened a home office in Leadenhall Street, which was under his control until he retired in 1899, when Mr Kidd took his place. He remained in charge of the London office at Bury Street Chambers, E C, until his death in 1925.

Mr F Portlock, son of the late Mr G T Portlock, for many years a director of the Clan Line, reached India in 1906 to take over the management of the Bombay office, and four years later he

became a partner. Mr Chubildas Lallubhai died in 1914, and since then the business has been owned and carried on by Mr Portlock in Bombay.

The interests of Messrs James Mackintosh and Co are of a very diversified character, but they specialise in shipping matters, especially the agency of steamers, and the firm are also chartering brokers, charterers of ships on their own account, agents for sale and purchase of vessels and representatives of the following:

- North of England Protecting & Indemnity Association
- West of England Steamship Owners' Protecting & Indemnity Association
- Standard SS Owners' P & I Association, Ltd
- Clyde SS Insurance Association, Ltd
- British Shipowners' Mutual P & I Association, Ltd
- Sunderland Steamship Owners' Protecting and Indemnity Association
- United Kingdom Mutual Steamship Assurance Association Ltd
- London Steamship Owners' Mutual Insurance Association Ltd
- Newcastle Protecting & Indemnity Association
- Neptune Steamship Protecting & Indemnity Association
- Britannia Steamship Insurance Association, Ltd
- Hull Mutual Steamship Protecting Society, Ltd
- Assurance Foreningen Skuld
- Assurance Foreningen Gard
- Swages Angfartge Assurance Forenings

Northern Shipowners' Association
 Dansko Rederes Retsavein (Danish Shipowners'
 Defence Association)
 American SS Owners' Mutual Protecting & Indemnity
 Association of New York, and
 United States Protecting & Indemnity Agency, Inc,
 of New York

Messrs James Mackintosh and Co are owners
 of the business of the Omiar Foundry and Engin-
 eering Co, Ltd, which went into voluntary liqui-
 dation in 1926 They have been since 1913 secre-
 taries and treasurers of

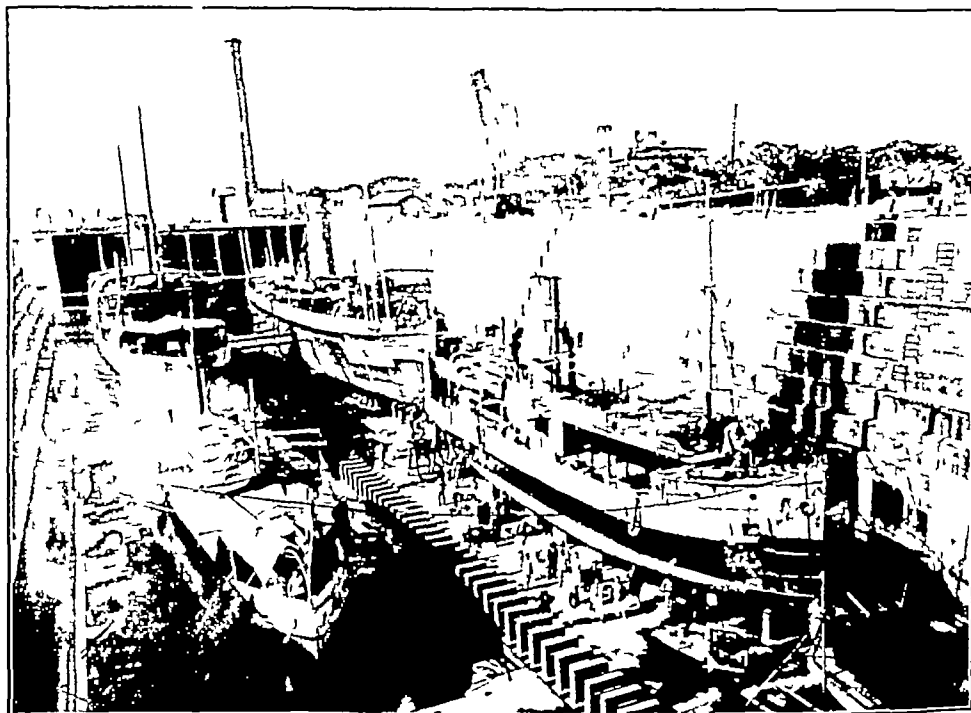
H I DIXON and CO, LTD,
Engineers, Iron and Brass Founders, Ship Repairers, etc, Mazagon.

THE establishment of this company is one of the
 largest and best equipped of its kind in Bombay.
 A special feature is made of dry dock work, but
 nothing is too great to be undertaken there, and
 the company are equally skilful and prompt in
 fitting out a large steamer as they are in dealing
 with the requirements of a craft of comparatively
 small tonnage. The business was founded in the
 year 1886 by the late Mr H I Dixon, who opened
 works in Hospital Lane, Mazagon, and it was not
 long before the concern began to develop very

shops, which comprise the usual departments for
 an engineering concern.

In 1913 the firm was formed into a limited
 liability company, with Messrs James Mackintosh
 and Co as secretaries and treasurers.

During the Great War Messrs H I Dixon and
 Co, Ltd, were entrusted by the Government of
 India with important and urgent commissions in
 preparing and equipping steamers for transport
 service. They undertake all kinds of construc-
 tional, engineering, and repairing works, and are



FIVE VESSELS UNDERGOING REPAIRS BY H I. DIXON and CO, LTD.
IN THE HUGHES DRY DOCK, BOMBAY

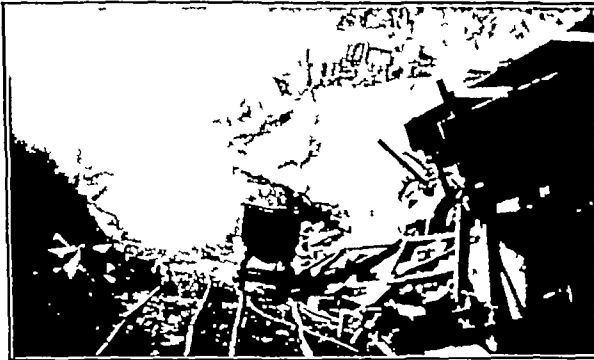
successfully. Eventually the greater portion of
 the site upon which the works were erected was
 required for the construction of the Port Trust
 railway. As the remainder of the land was utterly
 inadequate for the business, a suitable plot in
 Mazagon Road was obtained whereon new work-
 shops were built in 1911 fully equipped with
 modern machinery and plant. Even that place
 eventually became inadequate, and the company
 have now much larger premises in Love Lane.
 The original premises in Hospital Lane are still
 retained for the manufacture of brass and copper
 specialities, but the bulk of the work—and particu-
 larly that of a heavy character—is done in the new

amongst the companies who hold a licence to use
 the Hughes and Merewether Dry Docks. Being
 also on the list of Government contractors, they
 secure a considerable amount of work for public
 works and other departments. They have a large
 staff of certified European engineers, who exercise
 strict supervision in every department, and several
 hundred skilled workmen are constantly employed.
 The telegraphic address of the company is
 "NOXID," Bombay.

Messrs H I Dixon and Co, Ltd, are agents
 for Storry Smithson's anti-corrosive and anti-
 fouling compositions and Rawplugs Co, Ltd.

THE TATA CONSTRUCTION COMPANY, LTD ,
Phoenix Building, Sprott Road, Ballard Estate

THE TATA CONSTRUCTION Co , LTD , was formed in 1920 by a merger of Messrs Phatak and Walchand, Ltd , who had been successfully engaged in contract work for a considerable time



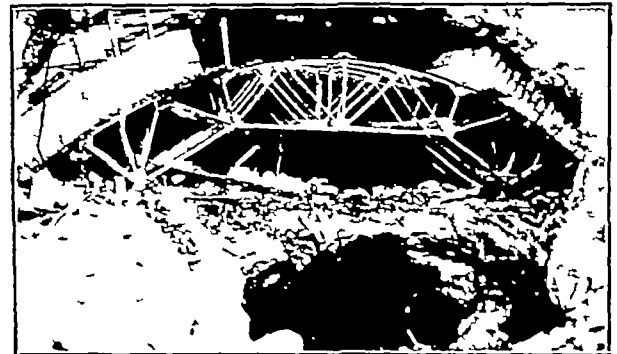
Portion of tunnel No 1 of the G.I.P Railway Bhore Ghat Realignment Works, 3,000 feet in length on a continuous curve. This tunnel, made by the Tata Construction Co , Ltd., was started from both ends and two shafts over 100 feet deep, and was met almost at dead centre within a record time

and their plant, worth about £50,000, consists of twenty-five miles of light railway with eight locomotives and necessary rolling stock, pumping plant, complete tunnel plant with up-to-date compressed-air plant, etc

The Tata Construction Co , Ltd , operate through five associated companies, viz Marsland, Price and Co , Ltd , The Hindustan Construction Co , Ltd , The All India Construction Co , Ltd , The Eastern Construction Co , Ltd , and The Indian Hume Pipe Co , Ltd Their operations are spread over the whole of India, and the important undertakings in which they are at present engaged are tunnel work, costing about a quarter of a million sterling, for the G I P Railway, near Poona, railway bridges on the Nerbudda, costing £60,000, Sukkur, £30,000, Shahpura and Basta, £30,000, for the G I P , and for the N W Railway a bridge on the Indus at Kalabagh They recently completed "formation" work for the Tansa mains of the Bombay Municipality at a cost of about £700,000



Poona face of No 2 Tunnel of the G I P Railway Bhore Ghat Realignment Works, made by The Tata Construction Co., Ltd The length of this tunnel is about 1,200 feet on a continuous curve



Steel centring for the arch of the G I P Railway Bhore Ghat Tunnel Works, designed and constructed by The Tata Construction Co., Ltd This steel structure could be moved on rails laid on the screw backs.

The company undertake constructional work such as railways, including tunnels, bridges, buildings, and have on their staff about sixty Indian qualified engineers and eight European engineers They have a workshop on which £40,000 has been spent,

The business is held in high esteem, being operated by an expert contractor and under a Board of Directors, some of whom control the largest manufacturing concerns in India The head offices are at Phoenix Building Ballard Estate, Fort

A E G INDIA ELECTRIC CO , LTD , Phoenix Building, Sprott Road, Ballard Estate

THE ALLGEMEINE ELEKTRICITÄTS-GESELLSCHAFT known all over the world by the letters A E G , was founded on April 19, 1883, with an initial capital of 5 million marks The original purpose of the company was to extend the employment of the system of illumination discovered by Edison, by supplying incandescent lamps and erecting power stations for the production of electric current

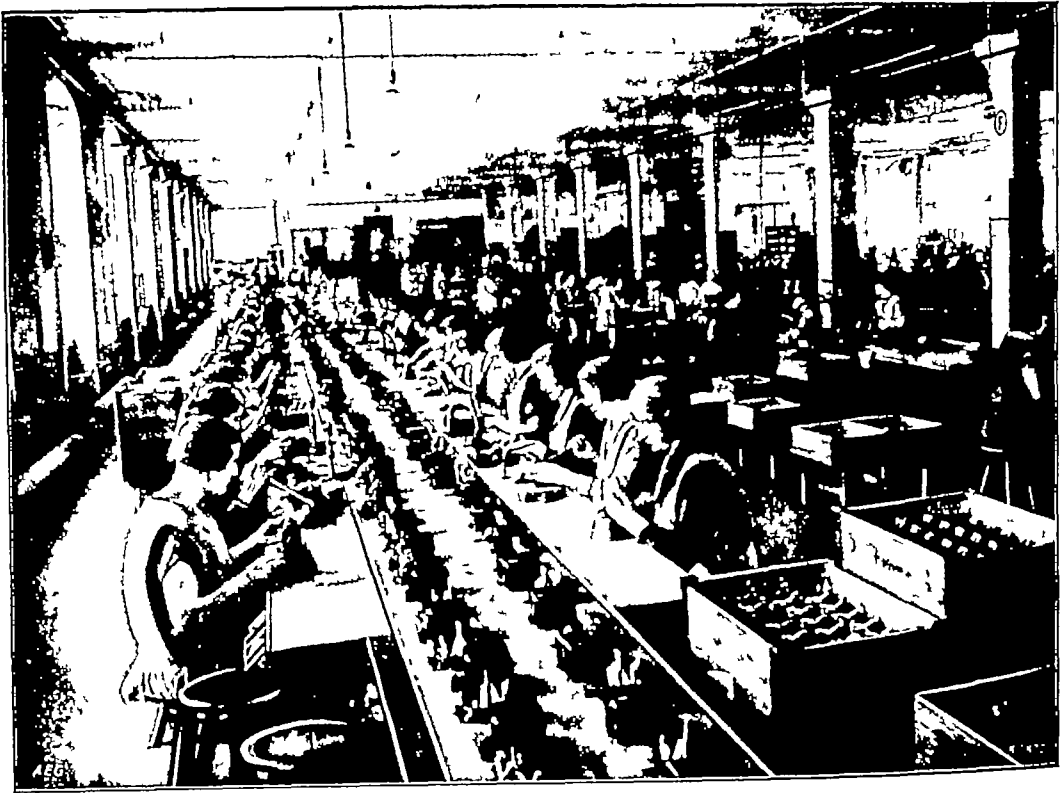
In 1887 the share capital was raised to 12 million marks The manufacture of dynamos and motors was begun at the commencement of 1888 and new

factories erected for the production of everything connected with electricity Following on the construction of the first power station at Berlin, further electricity works were installed in Germany and abroad About the same time the A E G turned its attention to the development of the electric tramway industry A great step forward in the field of electrical power transmission was made in the year 1890 as a result of the three-phase current system elaborated by Dolivo-Dobrowolsky an engineer in the company

employ An event of historical prominence in the electro-technical world occurred about this time in the erection of the first electrical power-transmission system which, on the occasion of the Frankfurt Electricity Exhibition of 1891, conveyed current to Frankfurt from the hydraulic power station at Laufen, on the Neckar, 175 kilometres distant

The best conception of the rapidity of the company's development is afforded by a survey of the growth of the capital which increased simultaneously with the expansion of business for entire plants (power stations, tramways, industrial

Hennigsdorf Works (Locomotives)
 Oberspree Cable Works
 Meter Works
 Rheinstrasse Works (Apparatus)
 Hennigsdorf Porcelain Works
 Electrical Instrument Works
 Annaberg Works (Installation Material)
 Crottendorf Works (Fuses, etc.)
 Scheibenberg Works (Fittings)
 Freiberg Works (Automatic Fuses)
 Millheim (Rhur) Works (Assembling and Repairs)
 Stuttgart Works (Apparatus and Repairs)
 Electric Heating Company, Nürnberg (A E G Heating Apparatus)



A. E. G. METER FACTORY.
 FITTING PARTS BY THE TRAVELLING BAND SYSTEM.

plants), as also with the extension of the factories, more especially with the erection of the big factories in Brunnenstrasse, the Oberspree Cable Works, the Turbine Factory, the Transformer Factory in Oberschöneweide, the factories in Hennigsdorf, etc. In 1890 the share capital had already reached 20 millions, in 1900 it was 60 millions, and in 1914 it was 155 million marks. In 1927 a further augmentation to 186,250,000 marks took place.

The ground area belonging to the company amounts in all to approximately 1,000 acres, and the employees number 80,000.

A E G Factories

Sixteen large factories work for the home market, and for export, viz
 Brunnenstrasse Works (Machines)
 Turbine Works (Steam Turbo Generators)
 Transformer Works

The head office of the A E G is at Friedrich-Karl-Ufer 2-4, Berlin, N W 40, and branches and agencies are established throughout the world. The A E G India Electric Co., Ltd., therefore has behind it an organisation extraordinarily well adapted for every phase of electrical development in India, and besides its own branches it has agents throughout the country.

Among the most prominent plants of the many hundred large works the A E G has designed and erected entirely or fitted with machinery in Germany and in all parts of the world are the following:

Hydro Power Plants

Power Plant Hengstey (Rhine)
 Norge Power Plant (Norway)
 Bavarian Water Power Scheme (Walchensee, Inn, Isar)

Azusagrwa Electric Water Power Co (Japan)
Lima Light, Power & Tramway Co (Peru)
Ferro carril de los Altos Quezaltenango (Guatemala)
Carquito Bogota (Columbia)
Blumenau (Brazil)
Toentang (Java, Dutch Indies),
San Simonito Mexico)

The output of these plants range from 40,000, 29,000, 20,000, 14,500 kva, etc, for a single generator

A very great number of steam power plants have also been supplied and erected by the A E G, such, for instance, as Golpa-Zschornowitz (aggregate 200,000 kw), Frimmersdorf, Breitungon, Schulau-Unterelbe, Goldenberg (4 turbo-generators 50,000 kw each), Commodore Rivadavia (Argentina), and many others

A special feature of the A E G is the manu-

Municipal Council of Cocanada, Gondal, Nasirabad
The Pudukottah Electric Supply Corporation, Ltd
Rander Electric Supply Co, Ltd

The sizes of the individual Diesel engine generators are 400, 250, 100 h p, etc, and in most cases complete power stations and distribution systems have been erected by the A E G

Turbo Generators

Multan Electric Supply Co, Ltd

Transformers

Gaekwar's Baroda State Railways (18 transformers)

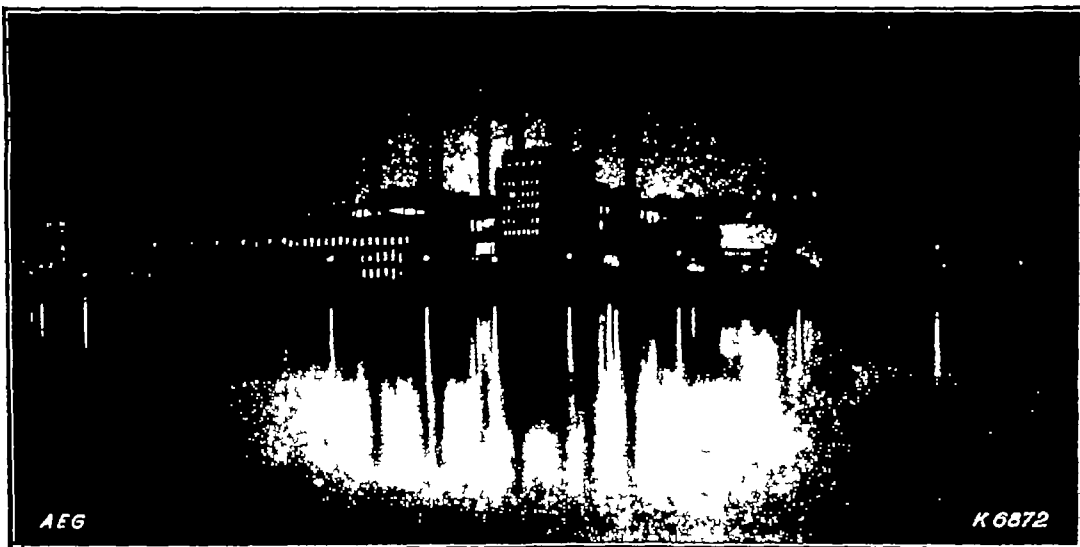
The Trichinopoly Electric Supply Corporation (5 Transformer Sub-stations)

Industrial Installations

Kirloskar Bros, Ltd, Kurlskarvadi (Complete Factory Power Plant)

Steam Locomotives

Jodhpur Railway (3 Steam Locos, "Mikado")



Super power Station Klingenberg, in Rummelsburg, Berlin, designed and erected by the A. E G. This plant is recognised by all authorities in Germany and abroad as the finest achievement in the construction of super power plants ever undertaken.

facture and complete erection of special plants for the requirements of oversea countries such as hydro-electric power schemes, steam turbine generating plant, Diesel and semi-Diesel generating plant, Small gasoline engine driven dynamos, small self-regulating water wheel driven dynamos, Electrical equipment for all overseas industries, e g, metal mines and smelters, dredgers, oil wells, nitrate factories, flour and rice mills, cotton ginning plants, meat packers, lumber mills, ice factories, Electrical equipment for tropical agricultural industries, e g, cane-sugar, coffee, tea, tobacco, rubber, sisal hemp, fruit, and other plantations, including electric dryers and transportation, irrigation schemes

Special designs for severe local conditions such as very hot and humid atmospheres, high altitudes, outdoor mounting, road transportation, etc

Some of the plants recently supplied by A E G for India, or on order, include the following

Diesel Power Plants

Aberath Electric Supply Co, Ltd

Bharatpur Electric Supply Co

Laboratories

College of Engineering, Poona (Installation of Electric Laboratory)

Ranarex Co Flue Gas Recorders (2)

The Burmah Oil Co, Ltd, Rangoon (10 Recorders) and others

The A E G employ a large staff of well trained and experienced engineers, and offer their services as consultants for the solution of difficult technical problems. The A E G literature comprises a great number of interesting handbooks dealing with electrification in the textile industry, in mining, in the iron and steel industries, in the paper-making industry, in electric welding, electricity in agriculture, in theatres, ships' installations, traction, transport and many others.

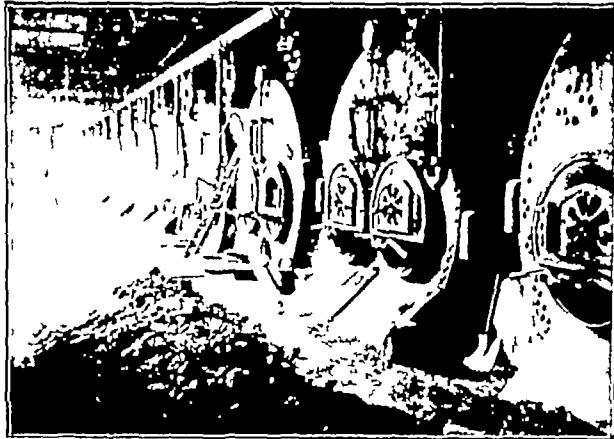
The "A E G Progress," a monthly journal, deals with the latest developments in electricity and describes interesting plants built by the company, whose abridged price list, brochures and descriptions of everything electrical, may be obtained on request.

Quotations will be submitted free of charge to interested parties.

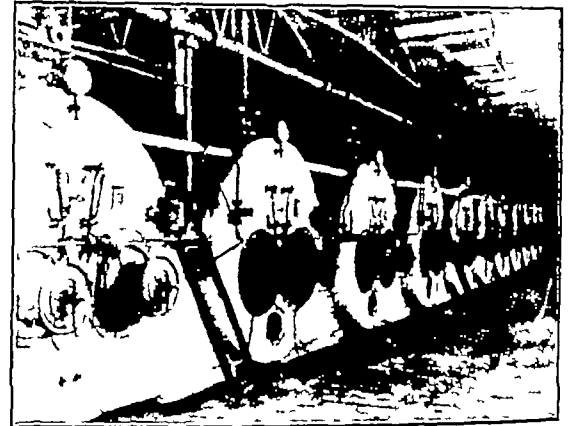
**WEMYSS and CO , Civil and Mechanical Consulting Engineers and Surveyors,
Suppliers of Liquid Fuel and Specialists in the Burning of Same, Ballard Estate**

Messrs WEMYSS AND Co have been established since 1923, and operate as indicated above. Amongst their achievements are the following

Kastoorchand Mill The lay out and design of all new buildings and extensions, the lay out and installation of all new machinery, i.e. —The new spinning mill, the extensions of the power house and the installation of two 750 H P Diesel

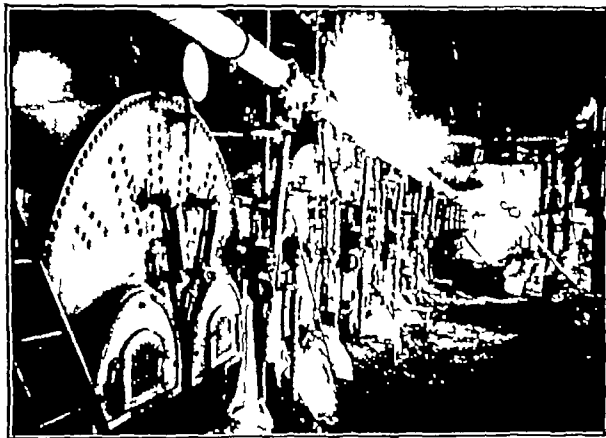


BOILER PLANT WHEN COAL FIRED.

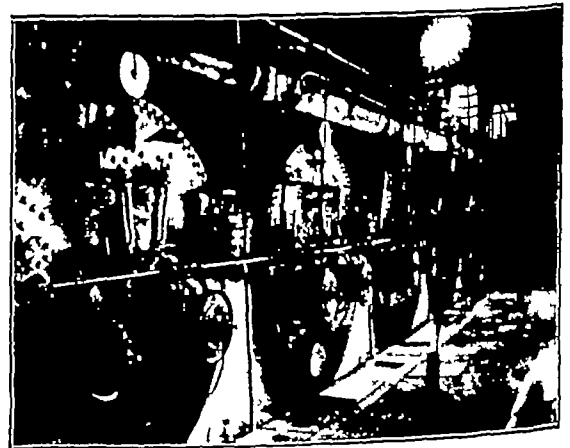


**SAME PLANT AFTER CONVERSION
TO OIL BURNING**

SPRING MILL, THE LARGEST COTTON MILL IN BOMBAY



**BEFORE CONVERSION TO OIL,
requiring a staff of more than 35 men**



**AFTER CONVERSION TO OIL,
requiring a staff of only 3 men**

Note the Cleanliness when Oil Fired

MANOCKJEE PETIT MILL, THE SECOND LARGEST BOILER PLANT IN BOMBAY

engines, direct coupled to generators. The conversion of all the boilers from coal to oil firing

Sir Shapurji Broacha Mill The new oil waste extraction plant. The scrapping of all the old spinning machinery and the new lay out of and the installation of all new machinery. New sizing department and weaving shed of 800 looms, its machinery and the gearing of same. New waste and cotton sheds. The conversion of all the boilers from coal to oil firing

machinery and gearing. New Diesel power house, the design of same for 5500 B H P and the installation of three Diesel engines of 1100 B H P each, direct coupled to generators. The conversion of all the boilers from coal to oil firing

Bradbury Mill The alterations and improvements of the entire mill. New sizing department, extensions to blow room, and spinning room. The installation of new power plant. The conversion of all the boilers from coal to oil firing

Mathradas Mill The new weaving shed for 500 looms, its gearing, and lay out Improvements to old mill gearing, and minor extensions to mill buildings The conversion of all the boilers from coal to oil firing

Mathradas Engineering Works The entire design and lay out of the new works, including a power house, pattern shop, foundry, machine shop, fitting shop, offices, stores, living quarters for manager and staff The works are capable of dealing with 200 tons of castings per month All furnaces throughout the works are oil fired These works were the most up to date at the time of completion

Madhowji Dharamsi Mill The whole of the new finishing and bleaching mill in reinforced concrete, including the electrolyser house, bleach house, largest in the world boiler house, and finishing building, a two-storey building with reinforced concrete columns, and floors throughout, also a high level reinforced concrete water storage tank of 200,000 gallons capacity The entire layout of the whole of the machinery of the latest type for all the departments The mill is the most modern of its day, and is designed to deal with 300 bales of cloth per day The new boiler plant consists of four oil-fired Babcock boilers The old mill has undergone various changes, such as replacing of old buildings with reinforced concrete structures, including new cheese-dyeing department, and yarn-drying department The scrapping of old machinery and the installation of new and the modernising of the drives and gearing The installation of refrigerating plant The conversion of all the boilers from coal to oil firing

Madharao Scindia Mill The design of a new weaving mill for 1,000 looms, the complete lay-out of all the machinery and its gearing The scrapping of the whole of the machinery of the spinning mill and the installing of new, together with its gearing and drives The extension of various departments and the modernising of the mill generally The conversion of all the boilers from coal to oil firing

Khatau Makanji Mill, Bombay Dye Works, Dharamsi Morarjee, Dinshaw Petit Mill The conversion of the boiler plant from coal to oil firing

Manockjee Petit Mill The conversion of the boiler plant from coal to oil firing The second largest battery of boilers in Bombay

Framjee Petit Mill The scrapping of the whole of the power plant, including the old engines and Lancashire boilers, and the installation of a modern engine and Babcock boilers Oil fired

Indian Mill The installation of a new modern engine The conversion of the whole of the boilers from coal to oil firing

Spring Mill The conversion of the boiler plant from coal to oil firing This is the largest cotton mill in the world, and the largest batteries of boilers in Bombay

Textile Mill The conversion of the boiler plant from coal to oil firing The third largest battery of boilers in Bombay

New Kaiser-I-Hind Mill The installation of the new Babcock boilers oil-firing, and the conversion of the old boiler plant from coal to oil firing

Courtaulds (India), Ltd, Artificial Silk Mill The conversion of their old boiler plant from coal to oil firing and the installation of their new boiler plant, oil fired

The Bombay Steam Navigation Co, Ltd The conversion of four steamers from coal to oil firing

Dharamsi Morarjee Chemical Works The conversion of all chemical furnaces from coke to oil firing, and the boiler plant from coal to oil firing

Cassella's The installation of the new boiler plant, oil fired

Mr M E Wemyss, M I Mech E, founder and proprietor of the business of Wemyss and Co, was born in Edinburgh, and educated at King's College, London He served his apprenticeship with the Vauhall and West Hydraulic Engineering Co, afterwards becoming their assistant engineer and designer He then took up an appointment as works manager to the Eastern Engineering Co, Straits Settlements, and later was General Manager with Melby and Co in the Federated Malay States On the outbreak of war in 1914, being a volunteer in the Malay States Volunteer Rifles, Mr Wemyss was transferred to the British Army, and was with the British Expeditionary Force in France From a private he got his commission, served with several Field Companies, and finally was one of the five Inundation Officers in the British Army, having command of a large sector in the Arras, Ducea, Valenciennes area He then advanced with the Army of Occupation into Germany, and after demobilisation in April, 1919, took up an appointment as works manager with Alcock, Ashdown and Co Bombay, one of the largest engineering firms in Western India Thereafter he was appointed superintending engineer to Mathasdas Goculdas and Co, and was in charge of the largest group of cotton mills in the world before starting his present activities

Messrs Wemyss and Co are agents for The Wallsend Slipway and Engineering Co, Newcastle, The British Bye Products, Ltd, Abbey House, Westminster, S W 1, Gotham and Co Nottingham for their Keenes Cement, and the Pennsylvania Oil Co Their telegraphic address is "Wemyss," Bombay and they use Ben lvs code

STEINERS, LTD., Importers of Piece-goods, etc , Queen's Mansions, Prescott Road.

THE names of some of the business firms in Bombay are reminiscent of long past times and great achievements. Steiners, for instance! Everyone familiar with the piece-goods trade in England knows the prominent firm of F Steiner and Co , Ltd , whose five large works at Church, Lancashire, give employment to about 10,000 persons, and are amongst the oldest and most influential undertakings that have developed and sustained Lancashire textiles throughout the world. The history of that well-known business dates back to the days of the French Revolution, when a French refugee chemist named Frederick Steiner settled in Lancashire, and after exhaustive experiments, became noted for the excellence of his dyes, especially Turkey Red, derived principally from the madder root and animal blood. The name Turkey Red seems to have arisen because of the colour of the fez worn by the Turks. The business which Mr Steiner began in a small way soon underwent prosperous development, and in course of time became what it is to-day, one of the most famous cotton-dyeing and printing concerns in the United Kingdom.

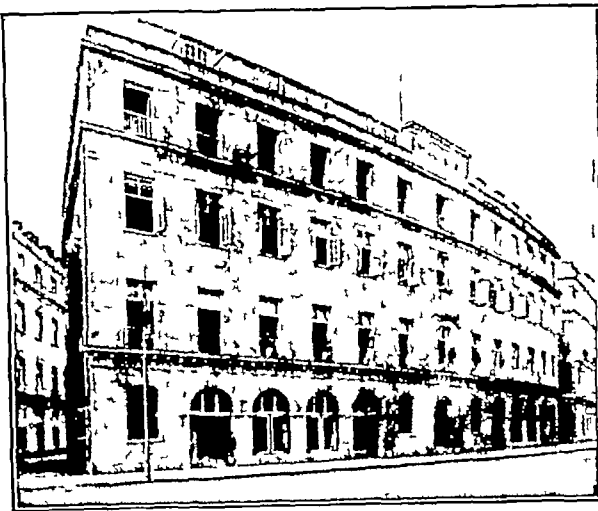
In the firm's branch at Bombay may be seen samples of the large range of beautiful patterns in which they have long transacted an important trade throughout India. The chromatic effects

and designs are exceedingly noteworthy and indicative of the remarkable idiosyncrasies of tastes and customs prevailing throughout India in that connection. Patterns popular in one district would be regarded with disfavour elsewhere, and interesting psychological studies are afforded by the firm's very great variety of standard designs and novelties that have their own marks amongst the bazaars of India.

Steiners, Ltd , is a subsidiary of the English company, and was formed in 1907. Prior thereto Messrs F Steiner and Co , Ltd , had transacted their Indian business through agents. The manager at Bombay is Mr T Sharples, who has been looking after the interests of the firm there for nearly forty years, and is probably the most experienced piece-goods man in that city. Before going to India he spent ten or eleven years in the works at Church, where the head office of the company is situated, and thus gained a very thorough and practical knowledge of the textile industry, which he has put to good use. Messrs Steiners, Ltd , have also branches at Calcutta, Karachi, and Delhi, and agencies throughout India. The manager at Calcutta is Mr H H Hessling, and at Karachi Mr W Statham. The Bombay telegraphic address is "Discrecco," and all the leading codes are used.

VOLKART BROTHERS, General Merchants and Commission Agents, Ballard Estate

THE Swiss firm of Volkart Brothers, founded in 1851 at Winterthur, Switzerland, has its ramifications throughout the world. The partners are the brothers George, Werner, and Oscar Reinhart,



OFFICE BUILDING OF
VOLKART BROS., BOMBAY.

all from Winterthur, where the Reinhart family can trace its descent from the 15th century.

Messrs Volkart Brothers' branch at Bombay, established in 1851 simultaneously with the creating

of the office at Winterthur, is the firm's headquarters in the East. The spacious Volkart Building in Graham Road, Ballard Estate, is the property of the firm, whose other branches in India are at Calcutta, Karachi, Madras, Tellicherry, Tuticorin, and Cochin. In addition to these they have 160 agencies and sub-agencies spread throughout India, as well as an establishment at Colombo and Galle, in Ceylon, at Singapore, in the Straits Settlements, and at Shanghai.

Messrs Volkart Brothers handle practically every kind of produce from the East, and also do a large business in importing manufactured goods from the West. They likewise represent numerous insurance companies, steamship lines, etc , etc.

The firm have preserved the legal status of a private company, the liability of the partners being unlimited. Various circumstances have, however, caused them to create independent concerns, such as concerns adapting themselves to the conditions obtaining in the respective countries. Thus have come into being Volkart G m b H , Hamburg, Volkart Brothers, Inc , New York, and The Nichizui Trading Co , Ltd , of Japan. The entire capital of the first two concerns is in the hands of Messrs Volkart Brothers, and they hold the major portion of the capital of the latter company.

THACKER and CO , LTD , Booksellers, Stationers, Printers, etc , Esplanade Road

THERE is no business in Bombay that has a greater appeal to everyone than that of Messrs Thacker and Co , Ltd , whose familiar establishment, in a central position in Esplanade Road, is the principal of its kind in the city. What a place it is for books on every conceivable subject and in every style of binding! In Great Britain and other Western countries the stock in the usual bookseller's shop is comparatively limited, for if any volume required is not in hand, it can be obtained in a few hours from its publishers, so that there is not the same necessity for carrying such an enormous variety of literature as that which makes Messrs Thacker and Co's premises so distinctive. It cannot be an easy matter to keep so great a stock as representative as possible of the enormous number of books which are being published daily on every subject. While the vast assortment includes volumes on science and philosophy and on all subjects of modern thought, together with a due proportion of general educational and devotional works, as well as numerous books on military subjects published by Messrs Thacker and Co , Ltd , the bulk of the literature is made up chiefly of novels of the past and the present, strongly bound and having, in addition, paper wrappers with vivid illustrations pertaining to their subjects.

Besides its reading matter the establishment is also very attractive on account of its comprehensive assortment of stationery, office requisites, and the infinity of articles pertaining to daily educated

necessities and routine. Although very many of these materials are imported, Messrs Thacker and Co , Ltd , are manufacturers of stationery and account books, and in their works, where about 120 people are employed, practically every modern contrivance is in use for the expedition and perfection of the work performed.

As printers, the firm transact a considerable trade, and their facilities and resources in that connection enable them to carry through the largest contracts with noteworthy speed and ability. They execute printing of every description, and in some departments are unsurpassed in the Orient, thus, for instance, in dye-stamping and heraldic printing they have attained a reputation that extends throughout India, and their high-class work in the production of regimental, invitation, and other cards, menus, etc , for all manner of festive and social occasions, compares very favourably with the best of the kind produced in Great Britain.

The business was originally a branch of Messrs Thacker, Spink and Co , the well-known Calcutta firm described on page 115, and was started in Bombay in the early part of the nineteenth century. In 1876, after a disastrous fire, it was resuscitated as a limited liability company under its present name. The managing director, Mr F W Petch, has been connected with the concern since 1902, and is chairman of the neighbouring business of Thomson and Taylor, Ltd. The telegraphic address of Messrs Thacker and Co , Ltd , is "Booknotes."

ROTHMAN'S (INDIA), LTD , Cigarette Importers and General Merchants, Central Bank Buildings, Esplanade Road

ROTHMAN'S (INDIA), LTD , is a subsidiary of the well-known London tobacco firm of L Rothman and Co , whose goods have been popular throughout India since the formation of their business nearly forty years ago. Like many other firms in England, however, Messrs L Rothman and Co found that agency trade, by which they had been operating in India, was unsatisfactory, and accordingly Rothman's (India), Ltd , was formed in 1926 as their sole concessionaires in the peninsula. The head offices of that company are at Bombay and there is a branch at Calcutta.

Nowhere in the world probably is there a better known and more popular tabacconists' shop than Messrs L Rothman and Co's at 5 and 5a, Pall Mall, London, W , which was opened by them in 1890, and where the nucleus of their extensive business was formed. That celebrated shop has been and is patronised by notabilities from all parts of the world—Royalties, Prime Ministers, Colonial Governors, etc , who know with appreciation the choice smokes procurable there.

The Rothman cigarettes are made of different kinds of tobacco. Perhaps once in four years there is in Virginia a vintage crop. It is then that the firm select, irrespective of cost, the finest leaf from one or two picked plantations. The cigarettes resulting therefrom are not made until at least ten years later. They are probably the world's longest matured and most exquisite Virginia cigarettes. To smoke them is a revelation.

Messrs L Rothman and Co's factory in Underwood Road, Clerkenwell, was enlarged in 1926 to double its former capacity and equipped with some of the most modern tobacco plant in Europe. It gives employment to about 500 persons.

Besides their celebrated smokes the firm supply all kinds of tabacconists' goods, and are the largest mail order firm in that connection in the United Kingdom. With the exception of their famous shop in Pall Mall, they had confined their attention entirely to mail order trade until a few years ago, when they started opening branches in London and throughout England.

THE EASTERN EXPRESS CO , LTD , Forwarding Shipping and Clearing Agents, Ballard Estate

An article on this firm will be found in the section entitled "Commercial Kitchens."

WILSON, LATHAM and CO., LTD , Merchants, Central Bank Building, Bruce Street

MESSRS WILSON, LATHAM AND CO, LTD, were incorporated in 1924 and amalgamated with the old established and well-known firms, all related to each other, of Wilson, Latham and Co, Manchester, Latham, Black and Co, Rangoon, and Latham, Abercrombie and Co, Bombay. The commercial records of Bombay bear witness to the prominence and influence of Mr A G Latham, one of the founders of Latham, Abercrombie and Co. He was president of the Bombay Chamber of Commerce in 1848-49. Mr Abercrombie was pre-

sident of the Chamber of Commerce of that city in 1899.

Messrs Wilson, Latham and Co, Ltd, are, as might be inferred from their Manchester connection, large importers of piece-goods. They import also merchandise of almost every description, with the exception of liquors, and their trade extends throughout the Indian Empire. The local directors are Messrs J R Abercrombie and E Hargreaves. The firm's telegraphic address is "Heureuse," and the codes used are the A B C 6th edition, Bentley's, and Schoefield's.

**EWART, LATHAM and CO,
THE ANGLO-SIAM CORPORATION, LTD,**

} Merchants and Agents, 3, Tamarind Lane

THE business of Messrs Ewart, Latham and Co was founded in 1846 by Mr Peter Ewart, of Liverpool, in partnership with a Mr Lyon under the name of Ewart, Lyon and Co, which was continued until 1846, when Mr A G Latham became a partner and the title was altered to Ewart, Latham and Co. Mr A G Latham was president of the Bombay Chamber of Commerce in 1848-49, and, retiring from Messrs Ewart, Latham and

Co some time in the fifties, founded the firm of Latham, Abercrombie and Co, which in 1924 was incorporated with other allied concerns as Wilson, Latham and Co, Ltd. About 1890 Messrs Ewart, Latham and Co's office at Karachi was opened in the name of Ewart, Ryrie and Co, and in 1921 Messrs Ewart, Latham and Co and Ewart, Ryrie and Co were amalgamated with The Anglo-Siam Corporation, Ltd.

THE ANGLO-SIAM CORPORATION, LTD

AMONG the large business premises on the east bank of the River Menam at Bangkok are those of The Anglo-Siam Corporation, Ltd, which occupy an area of about thirty acres, and have a frontage on the waterway of about a quarter of a mile, with excellent wharves at which the biggest steamers reaching the city can berth. The picturesque residence which forms so noteworthy an object in the middle of the company's utilitarian godowns and saw-mills was erected seventy years ago by an American missionary, and the ambitious scale on which it was planned and materialised was originated by the confident hope that the structure would eventually be taken over as the American Consulate. That expectation, however, was not realised, and, instead, the building became in the early eighties of last century the offices of Messrs Clarke and Co, general importers and exporters, who were in 1897 appointed managing agents for the Siam Forest Co, that concern working large timber concessions it had received from the Siamese Government. In 1907 the two businesses were amalgamated under the name of the Siam Forest Co, Ltd, and in 1917 the designation was altered to The Anglo-Siam Corporation, Ltd.

The business is one of the largest undertakings in Siam, and the company's timber concessions cover about 3,000 square miles. Their new saw-mill is one of the largest and best equipped establishments of the kind in the Orient. The wood handled is chiefly teak, which is floated down to Bangkok in the form of logs. For their reception a storage pond has been let in from the river,

whence they are hauled up into the saw-mill by powerful machinery, and are dealt with at an average rate of 50 logs per day. Most of the sawn timber is exported to India, and the remainder finds its way to all parts of the world.

The Anglo-Siam Corporation, Ltd, are the largest coal dealers in the country, and they keep big stocks of coal at Bangkok. The alterations and improvements recently effected in their premises enable two steamers to berth at the wharves, where only one could be accommodated formerly.

The capital of the company is £250,000, of which there has been issued £192,866, made up of 15,000 preference shares and 177,866 ordinary shares. The company's head office is at 5, St Helen's Place, London, E C, and they have also branches at Singapore and Karachi.

At Bombay the company are agents for

The London Assurance Corporation (Fire, Life, Marine, & Accident)

The Alliance Assurance Co, Ltd (Settlement of Marine Claims)

The National Guarantee and Suretyship Association, Ltd, Edinburgh

Nobel's Explosives Co, Ltd, London

Pinchin, Johnson, & Co, Ltd, London

Shackell, Edwards & Co, Ltd, London

Curtis's & Harvey, Ltd, London

Boots Pure Drug Co, Ltd, Nottingham

The Government of British North Borneo

De Grelle, Houdiet, & Co, London

Joseph Crosfield & Sons, Liverpool

Their telegraphic address at Bombay is "Ewart," and the codes used by them are Bentley's, A B C, and private.

THE POLDI STEEL WORKS, Ahmedabad House, Ballard Estate

THE vast Poldi steel organisation is the largest producer of high-quality steel in the world. Poldi high-speed steels contain a combination of alloys in proper proportion one to the other, ensuring steels of guaranteed uniform quality, equal or superior to any high-speed steel on the market. Years of experience, involving costly experiments, have been devoted to improving the strength, cutting power, durability, and uniformity of these brands. Care and attention in the selection of raw materials, proper melting and scientific control of the various processes of manufacture, from the ingot to the finished bar, have produced the highly successful and uniform brands of "Poldi" high-speed steel which are unsurpassed in efficiency.

The great business was founded two centuries ago, and its enormous expansion is one of the most noteworthy of modern industrial achievements. It has branches and warehouses in every important city in the world. In England it has offices at Bridge Wharf, Caledonian Road, King's Cross, London, and is operated under the name of Poldi Steel Co., England, Ltd., in Australia it is known as the Poldi Steel Co., Australia, Ltd., in the

United States its designation is the Poldi Steel Corporation of America, and at Prague, where its headquarters and principal works are situated, it is called the Poldi Steel Works.

Established since 1921 in India, the Poldi Steel Works has its headquarters for that country at the address indicated above, and branches at Calcutta, Madras, Karachi, Rangoon, and Colombo. The Poldi Steel Works is the only undertaking of its kind with its own offices in India, dealing direct with its customers, as other steel manufacturers transact business in that country through agents, consequently, the Poldi Steel is not only unsurpassed in quality, but also in its low price, the latter being possible through the company's huge output and the absence of middlemen's or agents' commissions. The company claim to be the only house selling quality steels in India and maintaining a staff of skilled experts whose free services on technical matters are at the disposal of steel buyers.

The general manager for India, Burma, and Ceylon is Mr Arthur C. Snow, M. Inst. Mets., A.M.I.E. The telegraphic address is "Kypoldiste," and the code used is the A.B.C. 6th edition.

KEMP and CO., LTD., Pharmaceutical Chemists, Head Office, Warehouses, and Laboratories, Charni Road, Queen's Road

In former times the establishments of the apothecaries, the predecessors of the modern chemists and druggists, were usually owned and operated by physicians, whose stocks of remedial agents reflected not only the restrictions of medical science that had until then been evolved, but also the limitations of pharmaceutical and industrial enterprise in the same connection. There were then no aesthetics and none of the modern triumphs of scientific research and experiment as are now represented by the vast variety of products manufactured or supplied by Messrs Kemp and Co., Ltd., the famous Bombay firm who have done, and are doing, much indeed for the prevention and amelioration of pain and illness and the enhancement of physical well-being in India.

Their business was started in 1868, and has kept in line with every discovery of importance in medical and pharmaceutical science since that time. Their warehouses and laboratories occupy an area of about an acre, give employment to about 200 persons, and are equipped with wonderful appliances that are the outcome of long continued effort and aspiration for the perfection of process and result in the manufacture of pharmaceutical goods. Many pages of this volume would be necessary for an adequate description of the interesting operations and their remarkable results. It is a place of highly specialised knowledge and skill, where innumerable strange odours are mingled together. Here and there are seen in course of preparation masses of materials that are eventually reduced into minute quantities of potent medicines. Here

and there things are ground into powder which passes through ingenious machines that make it into tablets and pills. Here and there are stills, extractors, percolators, and other contrivances, glass tubes and receptacles, small and large, and an array of technicalities in ways and means beyond the comprehension of the uninitiated. The equipment includes an hydraulic press of forty tons' pressure and a vacuum evaporator of 250 gallons' capacity. The firm manufacture no fewer than 200 specifics of their own, which comprise remedies for ailments of every description, and which are very popular amongst all classes of people. They are also manufacturers of aerated waters, are contractors to Government, and are suppliers of not only drugs, chemicals, patent medicines, toilet requisites, etc., but also everything associated with hospital requirements. They have been awarded at various Exhibitions gold and other medals for the excellence of their productions, and have the honour of appointment to H.E. the Rt. Hon. Sir Leslie Wilson, Governor of Bombay.

Messrs Kemp and Co., Ltd., are manufacturers in bond and have dispensaries and branches in Hornby Road, Cumballa Hill, Charni Road, Bacculla, and Try Mahal Hotel.

The firm was formed into a limited liability company in 1882. The capital is four lakhs of rupees and there is a reserve fund of upwards of two and a half lakhs of rupees. The general manager is Mr R. S. Jackson, P.C.S., M.P.S. The telegraphic address of Messrs Kemp and Co., Ltd. is "Pharmacy" Bombay.

MACBETH BROTHERS and CO., LTD , Engineers, Kodak House, Hornby Road

WHEN the Indian milling industry of Bombay was being started in the early eighties of last century, Mr J B K Macbeth arrived there as a representative of Messrs J and E Wood, of Bolton, to supervise the erection of certain machinery in some of the new mills.

On the completion of his work Mr Macbeth established himself in Bombay as a consulting engineer, and he also secured agencies for several leading English engineers and manufacturers of machinery. His younger brother, Mr Norman Macbeth, joined him in partnership shortly afterwards, the firm being styled Macbeth Bros and Co, and offices were opened in Tamarind Lane. The name of Macbeth Bros and Co at that time became prominent in connection with general engineering, but particularly with regard to machinery and other appliances for the fitting of cotton, spinning, ginning, and weaving mills. In 1895 they opened a branch at Calcutta, and their present address in that city is at 135, Canning Street.

Mr Newman Taylor joined the firm in 1903, becoming a partner four years later, and about that time the company removed from Tamarind Lane to Kodak House.

Mr Norman Macbeth retired from the business in 1913, Mr J B K Macbeth taking over his brother's interests in the concern. The latter, however, died on December 9th, 1914. In 1916 the firm was formed into a private limited liability company, the directors now being Mr N B Macbeth, son of the founder, and Mr C W Hopkinson.

Messrs Macbeth Bros and Co, Ltd, besides being general engineers, devote particular attention to railway permanent way specialities. They were the pioneers in the introduction into India of agricultural machinery, and established and developed the trade in India of not a few well-known

English firms for whom they acted as agents. Amongst these, for instance, is that of Messrs Mather and Platt, whose sprinklers they were the first to introduce into the peninsula, and for whom they still make fire-proof doors.

At Byculla the firm have warehouses with 22,000 feet of floor space, where they keep large stocks of the goods manufactured by the many firms for whom they are agents, including the following:

Thos Robinson & Sons, Ltd, flour milling machinery
Cochran & Co, vertical boilers
Samuel Law & Sons, eud clothing
Bell's United Asbestos (India), Ltd, packing and jointing materials
The National Roofing Co, "Security" roofing
The Magnolia Anti-Friction Metal Co, Magnolia metal (Flower brand)
The Empire Fence Export Co, Ltd, "Empire" fencing
Healey Bros, driving ropes and bandings
Wales Dove Bitumastic, Ltd, solution and enamels
The Delta Metal Co, Ltd, Delta Metal No IV and Dintado
Devies & Metcalfe, Ltd, injectors of all kinds
The Unbreakable Pulley & Millgearing Co, mill gearings
Henry Wells Oil Co, lubricating oils
Indestructible Paints Co, Ltd, paints
Exors of James Mills, Ltd, taper pins and cotters
Frubanks Company, dart unions
Drabble & Sanderson, Ltd, circular saws
Fieins Jourdain Mouneret, vacuum pressure brakes, injectors
Liverpool Boiler Co, Ltd, Algor boiler svrup
Bramco (1920), Ltd, service recorders
Norris, Henty & Gardners, Ltd, crude-oil engines
August's Muffle Furnaces, Ltd, furnaces
Wm Hardill, Sons, & Co, Ltd, wood working machinery
C Islei & Co, Ltd, boring plants
John Shaw, Son, & Greenhalgh, Ltd, Shaw's boiler valves and mountings
Thomas Piggott & Co, Ltd, pressed steel tanks
Staveley Coal & Iron Co, Ltd, cast iron pipes and specials
Milwaukee Tink Works, petrol pumps
Chas Bingham & Co, calcium carbide

LEWIS and TYLOR, LTD , Belting and Hose Manufacturers, Sohrab House, Hornby Road

MESSRS LEWIS AND TYLOR, LTD, are famous throughout the world for the manufacture of belting, and their unsurpassed position in that connection is not the result of fortuitous circumstances of a few years, but the outcome of many decades devoted specially to the manufacture of belting of every description.

The firm started about 150 years ago as tanners and curriers, before Watts' first crude steam engine was used for anything but mining operations. In 1875 that engine was applied to a cotton factory, and thereafter, with the remarkable development which followed the application of steam power to industrial undertakings, Messrs Lewis and Tylor, leather experts, naturally turned their attention to meeting the great demand for the belting that was indispensable in connection with the new motive power which was to change utterly the conditions of the world. The improvement in

machinery was accompanied by corresponding improvement in belting, and so to-day no firm has achieved greater fame and attainment in connection with it than Messrs Lewis and Tylor, Ltd, at whose Gripoly Works, Cardiff, giving employment to some thousands of people, is made probably half the belting in use throughout the world.

Their celebrated "Gripoly" solid woven belting, of which they are the patentees and sole manufacturers, is made from camel-hair yarns, combined with a small percentage of cotton, and woven by a special process so as to ensure the greatest possible tensile strength and evenly consistent wear during the life of the belt. A special feature of great economic value is its triple twisted edge, woven into and homogeneous with the belt itself, designed for the purpose of eliminating the fraying due to guide forks. The belting is finally treated with a composition, the outcome of careful and

prolonged experiment, which completely permeates the body of the material, and is not merely a surface process. The finished article is a flexible, non-slipping, stretchless belt, impervious to heat and moisture, and all those variations of temperature and other atmospheric influences which work such havoc with leather, india-rubber, and other types of belting. The only treatment necessary after the belt is once in position is an occasional light dressing with the "Gripoly" belt preservative to keep the belt in condition, and is not in any way an artificial aid to its working efficiency. These features make "Gripoly" belting specially valuable for use in the tropics, where adverse conditions are prevalent.

Messrs Lewis and Tylor, Ltd, are also manufacturers of patent solid woven "Gripoly" belting, "Land T" Red Hair belting, Chamois Brand cotton belting, "C A B" guaranteed grade leather belting, Drop Stamp belting, conveyors and elevators banding, conveyors and elevators portable or fixed, "Lantee" high-pressure canvas fire hose, "Security" and "F A" grades canvas

hose, "Griplace" flexible steel belt lacing and "Gripoly" belt preservative.

Their productions are in great use everywhere throughout India, where for many years they operated through local agents. In 1920, however, in order to be able to render better service to their customers, they opened offices at Calcutta and Bombay. The firm employ a staff of skilled British engineers, who travel throughout the peninsula, and not only supervise the installation of new belting but also make reports and advise in connection with projected new equipments and the best methods for the greatest working economy and efficiency of machinery plants of every description.

The Bombay office is under the management of Mr G D Hynd, and Messrs Richardson and Cruddas, of the Byculla Iron Works, act as local secretaries for the firm. The telegraphic address of Messrs Lewis and Tylor, Ltd, is "Belthorse," and the codes used by them are the A B C 5th and 6th editions, Bentley's, and private.

WILKINSON, HEYWOOD and CLARK,

Varnish, Enamel, Colour, and Paint Manufacturers, Exchange Building, Sprott Road, Ballard Estate

MESSRS WILKINSON, HEYWOOD AND CLARK, who are contractors to H M Government and the principal home and foreign railways, etc, have been making paints and varnishes since 1770, and the experience they have gained during the 158 years in which they have specialised in that work explains the reason why their business is so well known throughout the world and, with its connections, the largest of its kind extant. The name of Messrs Wilkinson, Heywood and Clark is recognised wherever there is demand for high quality paints and varnishes. It is a universal achievement, an excellent synonym for British merit in everything relating to colouring oils and pigments. Throughout India, as elsewhere, it is a standard of recognition, and the dealers in the bazaars, as well as the big foreign merchants handling such things, find the firm's productions amongst their most reliable commodities.

When Messrs Wilkinson, Heywood and Clark first introduced their manufactures into India upwards of fifty years ago they recognised the necessity for studying on the spot the effect of the varying climatic conditions of the country on their productions, and with that object opened a branch at Bombay in 1882, when all goods of the firm's manufacture were thoroughly tested in a practical manner. This experience has ensured the supply of the particular classes of goods best suited to withstand the variable seasons of India. An outstanding feature of the company's manufacturing operations is their laboratory, where experiments and tests are conducted by specially trained chemists, and all products are subjected to a rigid examination by an expert staff before they are allowed to be sent away from the premises. Varnishes and other goods have been supplied in

large quantities to all the principal railway companies in India, and special preparations are now being supplied by the firm for motor cars and other vehicles.

Messrs Wilkinson, Heywood and Clark placed their works and services at the disposal of the Imperial Government on the outbreak of the Great War, and they succeeded in producing special time-saving paints and varnishes which were applied to a very large proportion of the immense output of shells.

The Bombay office is the firm's headquarters for India, and the general manager for that territory is Mr H B Atkins, who, before going to India, served for many years at the firm's factories in England. Messrs Wilkinson, Heywood and Clark's agents in India are as follows: Calcutta, Maldin and Co, Clive Buildings, Clive Street; Madras, Walker and Co; Karachi, Wm Jacks and Co; Rangoon, Charles R Cowie and Co. The telegraphic address of Messrs Wilkinson, Heywood and Clark at Bombay is "Myotomy," and their codes are the A B C 5th edition, Bentley's and private.

The proprietors of the business of Messrs Wilkinson, Heywood and Clark are Messrs Pinchin, Johnson and Co, Ltd, who are also allied to several other concerns of the same character, and thus form one of the largest paint and varnish combinations in the world. Messrs Wilkinson, Heywood and Clark's factories are in Poplar, Silvertown, and Liverpool. At Bombay they are agents for Cooper, McDougall and Robertson Ltd, Berkhamsted, the Jallo Turpentine and Rosin Factory, Lahore, and Reeves and Sons, London.

**WALTER N CRESSWELL and CO , LTD ,
Merchants and Agents, 16, Elphinstone Circle, Fort**

ESTABLISHED in 1884 by the late Mr Walter N Cresswell, who died in September, 1927, the business of Messrs Walter N Cresswell and Co , Ltd , has contributed an appreciable part to local commercial development. While operating as general merchants and importers of piece-goods, metals, machinery, etc , the firm have long been prominent and influential in the supply of the gold thread that is used so much throughout India in

the manufacture of fabrics of various kinds for apparel and articles of ornamentation.

The firm was formed in 1921 into a limited liability company, and the managing director is Mr W M Martin, Mr Cresswell's son in law, who has been connected with the business for many years.

Messrs Walter N Cresswell and Co , Ltd , are managing agents of

WOLVERHAMPTON WORKS COMPANY, LTD ,

one of the principal undertakings in Bombay devoted to the production of aluminium goods, in which the late Mr Cresswell was the pioneer in India. Wolverhampton Works Co , Ltd , was formed in 1896. Its factory gives employment to about 110 people, and is excellently equipped with modern machinery for the manufacture of practically everything into which aluminium can be fashioned. The range of utility embraced in that connection is very wide and comprehensive. The company are agents for the British Aluminium Co , Ltd , which exports to India a great amount of aluminium circles and sheets, and has installed there a considerable amount of aluminium cable, exporting, as a matter of fact, about one-third of that country's consumption of steel-cored strand cable. Wolverhampton Works Co , Ltd , is on

the Government list, supplies all kinds of hospital requirements, and does a very large bazaar trade.

The telegraphic address of Messrs Walter N Cresswell and Co , Ltd , is "Cresswell," Bombay, and they use the A B C code 5th and 6th editions. They are agents for the following:

Sir Jacob Behrens & Sons, Bradford
Sir Jacob Behrens & Sons, Manchester
Louis Behrens & Sons, Manchester
Ree et Cie, Paris
Henry Merieux, Lyons
C Dutel et Cie, Lyons
Jonas & Colver, Ltd , Sheffield
Security Press Guard Co , Birmingham
Seals, Ltd (Speedo machines), London
Martins, Ltd , London
H Greaver, Hamburg
Acton & Borman, Ltd , London

McKENZIES, LTD , Engineers, Contractors and Timber Merchants, Sewri

THE great development of Bombay during recent years has been contributed to in no small measure by Messrs McKenzies, Ltd , whose activities as engineers, contractors, and timber merchants, etc , permeate all branches of local material progress. Their business was founded about seventy years ago by the late Mr Alexander McKenzie, who in 1890 was joined in partnership by his eldest son, Mr George McKenzie, under the style of Alexander McKenzie and Sons. The continued rapid development of the business necessitating greater accommodation and further assistance, a company was formed in 1907 under the name of McKenzie's Saw Mills, Ltd. A smaller mill, adjacent to the original establishment at Mazagon, was acquired, and after being entirely refitted with new machinery, it was used exclusively by the carpentering and finishing departments.

Mr Kenneth McKenzie became a partner in 1903, just three years prior to the death of his father, and when his brother George died in 1913 he assumed management and soon afterwards was assisted by Mr H L McNeill, who arrived in India in 1913 for that purpose.

Meanwhile the company had been extending their operations in various directions, and in 1912 it was decided to transfer the whole establishment to new premises erected on land at Sewri, which had been acquired some years previously. The site, consisting of an area of 20,000 square yards,

is at the northern end of Bombay Island, and in close proximity to the timber ponds belonging to the Bombay Port Trust. The property borders upon land owned by the Trust, reclaimed under the Mazagon-Sewri Reclamation Scheme. It is bounded by three main roads, and is very near to the Sewri Station of the Great Indian Peninsula Railway Co.

Removal from the old mills to the new was commenced in 1912 and completed in 1913, work being carried on simultaneously at both the old and new premises, but the taking down, transfer, and refitting of such a large quantity of machinery was carried out in such a manner that work was not entirely suspended for more than a single week during the final transfer.

The company, registered in 1907 under its present title, specialise in the manufacture of high class heavy furniture, chiefly for banking and mercantile houses, and fittings of this description have been made for practically every bank in Bombay, for other banks in Calcutta and Madras, and for branches of some of these establishments at Amritsar and Mombasa. Fittings have also been supplied to all the important mercantile firms in Bombay, also large quantities of cut timbers to industrial and Government bodies. During the Great War Messrs McKenzies, Ltd , supplied no fewer than 7,000 horse-boxes for transport steamers. They also furnished deck planking in

very large quantities, especially for His Majesty's Australian ship *Brisbane* and to John Brown and Co, some of which was required for a super-Dreadnought launched from that well-known firm's shipyard

Messrs McKenzies, Ltd, have also made a special feature of general structural work and reinforced concrete. Among the many contracts carried through very successfully by the company was the flooring of the Mole station, Alexandra Dock, and for Messrs Asquith and Lord's premises, also for the Reay Road railway station of the Great Indian Peninsula Railway, a platform roof consisting of 17ft 6in cantilevers carried on a single row of pillars, thus giving an absolutely clear platform

They have also erected chawls, piers, jetties, reservoirs, tanks, bridges, and many buildings including the Imperial Bank of India, Allahabad Bank, National Bank of India, offices of Mulji Haridas, Mackinnon, Mackenzie and Co, Turner Hoare and Co, Ltd, Ahmedabad Power House, Barnes School, Deolali, extension to Royal Bombay Yacht Club, etc. Messrs McKenzies, Ltd, also carried through with the greatest credit the construction of the Bombay Race-course, which amounted approximately to 28 lakhs of rupees. Other achievements of the company are the Mahalakshmi Over-Bridge, 2,500 feet long,

built of reinforced concrete, and the foundations and decking of a bridge 2,500 feet long at Trichinopoly. The company's specialisation in concrete construction is aided by their exceptionally fine equipment of modern machinery for that purpose as well as saw-milling facilities for form and timber work

For upwards of twenty years Messrs McKenzies, Ltd, have been sole agents in Bombay Presidency for the waterproof "Malthead" roofing, with which they have covered a very large number of the principal buildings in Bombay, and laid millions of square feet of the same material in the Bombay Presidency

As sole local agents for the well-known Trinidad and Bermudez asphalt they have done much important work for the Municipality of Bombay, such as Frere Road, Hornby Road, and Cruickshank Road, the surface of these thoroughfares being equal to that of any in London, Paris, or New York

Messrs McKenzies, Ltd, are also agents for The Truscon Steel Co and The Insley Manufacturing Co. The managing agents of the firm are Messrs McKenzie and Co, the partners being Mr C C Sherwood and Mr B G Gillett, both engineers of wide experience. Their telegraphic address is "Sawmills," Bombay

DAVID SASSOON and CO, LTD, Merchants, Bankers, and Mill Agents, Forbes Street

THE Sassoon family of Bombay trace their descent from the Ibu Shoshans of Spain, and the first of the race to attain distinction was Mr David Sassoon, founder of the business of Messrs David Sassoon and Co, Ltd. Particulars of Mr David Sassoon will be found in the article on Messrs E D Sassoon and Co, Ltd, on pages 201-202

The vacancy in the firm caused by his death was filled by his eldest son, Albert (afterwards Sir Albert Sassoon, Bart), who was born at Bagdad in 1817, and died at Brighton in England in October 1896. This gentleman had the advantage of a sound education in English as well as in other languages, and by his foresight the business was very greatly extended, with the result that David Sassoon and Co came to be known as the "Rothschilds" of the East. During the lifetime of Sir Albert the firm constructed the Sassoon wet dock, which was the first of its kind to be made in India, and this enterprising action stimulated the Government to undertake the building of the Prince's dock, which was opened in 1879. The Sassoon dock is 1,460 feet in length, 1,000 feet in breadth and has a length of quays of 6,910 feet

The firm's manufacture of silk and cotton goods was considerably developed about that time and they also became managers of the Port Canning Company, who held estates near the mouth of the Mullah River in Bengal

In private life Sir Albert Sassoon followed closely in the footsteps of his illustrious father by his loyal support of educational and charitable

institutions. Special mention may be made of large sums of money contributed to the Elphinstone School in Bombay, of his foundation of scholarships at University and art schools, and his maintenance of the "David Sassoon Benevolent Institution," a school affording instruction to hundreds of Jewish children

In 1867 he was appointed a Companion of the Star of India, and in the following year he became a member of the Bombay Legislative Council. It was due to his munificence alone that the statue of King Edward VII—as Prince of Wales—was erected in Bombay. He received the honour of knighthood in 1872. During the next year he received the freedom of the City of London (he being the first Anglo-Indian to be thus distinguished). The Shah of Persia entertained him at the Empire Theatre in London in 1889 and conferred upon him the Order of the Lion and Sun, and in 1890 Queen Victoria raised him to the rank of baronet

Messrs David Sassoon and Co, Ltd, operate very largely as general merchants and bankers, and are managing agents for various important undertakings. Their head offices are at 9, King William Street, London, E.C., and they have branches at Bombay, Calcutta, Karachi, Hongkong, Shanghai, Hankow, and Manchester. The Chairman is Sir Philip A G D Sassoon Bart C B E, C M G, M P, and the directors are Messrs D R Sassoon, C J Longcroft, and Sir John H Davidson K C M G, C B D S O, M P

**HERBERT WHITWORTH, LTD., Cotton Manufacturers and General Merchants,
Yusuff Building, Churchgate Street**

No branch of business activity is more dependent upon idiosyncrasies of fashion and fancy than that of the piece-goods trade, which contributes so greatly to the commerce of all countries, and has long established and profitable markets for the productions of the Lancashire textile factories. Amongst the principal firms by which that trade is sustained are Messrs Herbert Whitworth, Ltd, whose well-known specialities are in popular demand throughout India and the Orient. These specialities include "Dilkoosh," "Scooter," and "Herwhit" white brocades, "Luminosa," "Hershyne," "Favosheen," "Whitgloss," and "Herluna" dyed-warp sateens, "Wireless" and "3939" fast black sateens. The range of this firm's patterns is truly enormous and represents a universality of supply that meets the extraordinary conservatism of India's millions in standard designs as well as the demand that also exists there for new and

novel chromatic combinations. The firm's "Lifting Jack" trade-mark in the Indian bazars has become exceedingly well established as the result of their enterprising activities by their own travelling representatives and their many agents at the principal centres of population. They have also branches at Calcutta, Rangoon, and Karachi, as well as at Bombay. Other branches are established at Aden, Bangkok, Shanghai, and London. The manager of the Bombay branch is Mr H Collier, and the travelling representative for India is Mr T Ernest Dawson.

Messrs Herbert Whitworth, Ltd, have been established since 1904, and have their head offices at Whitworth House, Princess Street, Manchester. They have also an office at Bradford, and are owners of the Pioneer Mills at Radcliffe, Lancashire. The telegraphic address is "Herwhit," Bombay, and the codes used are the A B C 5th edition, Bentley's, and private

E SPINNER and CO, Manufacturers of Khaki and Importers of Piece-goods, etc, Tamarind Lane

MESSRS E SPINNER and Co have been established since 1871, and have the distinction of being the first to place khaki on the market upwards of forty years ago. Before the advent of that exceedingly useful material there was endless trouble in India through the necessity of having to dye the clothes of the soldiers. The celebrated Leeman and Gatty patent fast-dyed khaki materials, produced exclusively at Messrs E Spinner and Co's works at Bannister Hall, near Preston, proved an immediate and an immense boon to the Army, and won glowing testimonials regarding their high quality and suitability from many notabilities, including Lord Roberts, H R H the Duke of Connaught, General Sir G R Greaves, K C B, K C M G, etc. Their "Stockport" khaki drill and "Wellington" khaki Bedford cord are adopted by Government as standard patterns for

free issue to British troops, and are, together with the firm's other patterns, in general use throughout the Indian Army and States, Police, Forest Department, etc, presenting a smart appearance even after years of wear and exposure to the Indian climate.

While specialising in khaki, and operating as contractors in that connection to H M War Office and India Office, Messrs E Spinner and Co are also large importers of general piece-goods and sundries, including aluminium and German-silver articles. They have a branch at Karachi and well established connections throughout India. The partners at Bombay are Messrs S Hanhart, E Erb, and O A Guggenheim. The manager at Bombay is Mr H Vogt. The telegraphic address is "Spinner."

BREUL and CO, Forbes Building, Home Street

THE exportation of cotton from India was established as an industry when sea routes were opened to traders, but it was not until the outbreak of the American Civil War in 1862 that it received a substantial impetus, as the Lancashire spinners had sympathy with President Lincoln and his cause and preferred Indian cotton to supplies of raw material from the Southern States. It was about that time that the business of Messrs Breul and Co, cotton brokers, was founded by the late Mr Augustus Breul, whose enterprise and good judgment were demonstrated during many a crisis in which well-known firms met with disaster. Mr Breul took an active part in the management of his business until some years before his death in 1927. The present

partners are his nephew, Mr Charles Walter du Breul, and Mr K S Nicholson. The father of the latter gentleman was in partnership with Mr Augustus Breul for very many years. The sub-managers are Mr C F Brandon, his brother, Mr H E Brandon, and Mr B S Nicholson. Messrs Breul and Co are the oldest firm of European cotton brokers and commission agents at Bombay.

They are agents for the Queensland Insurance Co, Ltd, and give employment to about a hundred persons. Their telegraphic address is "Breul," Bombay, and the codes used by them are Bentley's, A B C 5th and 6th editions, Cotton code and Meyer's Atlantic code.

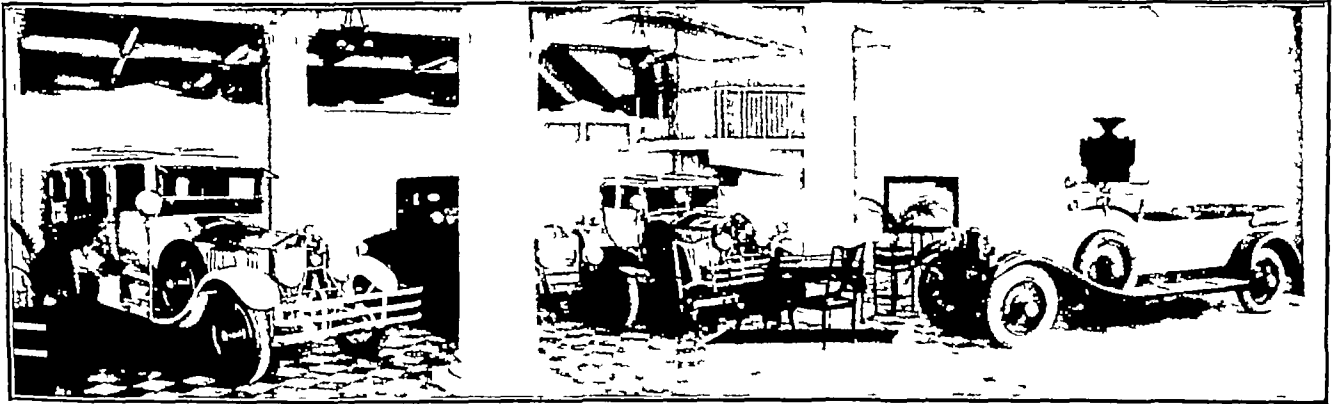
ROLLS-ROYCE, LTD , Hughes Road, Cumballa Hill

Of all the many well-known motor cars now justly claiming meritorious recognition there is nothing that equals in fame or worth the Rolls-Royce. That name has so long been associated with the highest possible achievement in automobile engineering that it has become a synonym for the superlative. It stands for supreme production, the finest and most reliable workmanship, and the most graceful and luxurious appointments. The latest model of the Rolls-Royce is rightly termed the "Phantom," for it glides noiselessly at any speed, and the simplicity and perfection of its control is one of the most remarkable achievements in automobile engineering.

The story of the wonderful vehicle goes back to 1904, when Messrs C S Rolls and Co exhibited at the Paris Automobile Salon a car which had been constructed by Mr F Henry Royce, who was then managing director of Royce, Ltd, an important Manchester electrical company. That car was

miles reliability trial in 1907 under observation of the Royal Automobile Club of England. This entailed that the car should not be touched without the fact being recorded by the observers of the club. During this unprecedented and severe trial the car was driven over 400 miles a day, and there was only one involuntary stop of thirty-six seconds' duration, due to the accidental shutting of a petrol tap.

At the conclusion of the trial the chassis was dismantled completely by the club officials to ascertain the cost of replacing all worn parts. The total bill sufficient to make the chassis equal to new to the satisfaction of the Royal Automobile Club's technical staff was £2 2s 7d, and this, it should not be forgotten, was twenty-one years ago! It is of interest to record that the tested car, which, by the way, was christened the "Silver Ghost," owing to its phenomenal silence in running, was bought by a private customer who has since used



SHOWROOM OF ROLLS ROYCE, LTD , CUMBALLA HILL

awarded a special medal and diploma, and was the first of the celebrated vehicles that ere long represented the highest standard of automobile production, which all other manufacturers sought in vain to reach.

Up to the year 1906 the firm of C S Rolls and Co absorbed the whole of the motor car output of Royce, Ltd, and in December of that year a public company was formed under the style of Rolls-Royce, Ltd.

Even in those early days it was the ambition of Messrs Rolls-Royce, Ltd, to build the most perfect vehicle in the automobile world. To this end it was decided to concentrate on one model, which was to be a six-cylinder engine of 40/50 h p rating, and this decision was taken in spite of the many successes in reliability trials and competitions of the early four-cylinder 20 h p Rolls-Royce. Since the year 1906, when Mr Royce designed the first 40/50 h p six-cylinder side-valve engine, the model itself was not changed (with the exception of small details) until 1925—truly an amazing record. In order that this car should be proved out under the most trying and arduous conditions a stock car was entered by the company for a 15,000

it for a distance of over 360,000 miles, and it is in service to-day, running as sweetly as ever.

In 1908 the company had commenced to expand its energies abroad. In the Bombay-Kolhapur trial of that year, of over 620 miles, including the ascent of the Ghats, with neither spares nor tools carried and with a locked and sealed bonnet, a standard 40/50 h p Rolls-Royce car came out first. It also won the Mysore Cup in the competition of that name, besides securing a silver medal, two gold medals, two diplomas, and was awarded the first prize for appearance in the Bombay Motor Show of 1908. In 1911 the company had the honour of supplying eight cars for the use of His Majesty the King-Emperor George V and Her Majesty Queen Mary, and also for the use of the Government of India, for the Durbar which was held in Delhi in honour of the coronation of His Majesty the King-Emperor. In that year the company opened a showroom and repair works in Bombay, and so large were the company's interests then becoming that showrooms and repair works were established in Paris, the latter being the first English car business to be started in the French capital.

During the Great War Rolls-Royce cars were supplied for the use of His Majesty the King-Emperor, His Royal Highness the Prince of Wales, and the Commanders-in-Chief of the British and the French armies. Hundreds of chassis were converted into armoured cars, the history of these being one long story of success after success, due to the great reliability of the mechanical details of the chassis. One interesting fact is that the car used during the War by H R H the Prince of Wales is now owned by one of the ruling chiefs in India. Even before the British entered into the War, experimental work was going on at the Rolls-Royce factory to evolve the "Rolls-Royce" of aeroplane engines, and to-day Rolls-Royce reliability is as much recognised in the aviation world as it is amongst motorists. The Rolls-Royce aero engine has been used in many of the great pioneer flights since the Armistice. Amongst other pioneer flights since 1919 an aeroplane equipped with Rolls-Royce motors was the first machine in the world to make a direct flight across the Atlantic Ocean. During the same year an aeroplane flew from England to India, and another flew from England to Australia. In the following year the flight from England to South Africa was accomplished. Later a seaplane flew across the South Atlantic, and yet another seaplane flew round Australia. All the aeroplanes in these flights were equipped with Rolls-Royce motors, and it should be remembered that the flights were in every case unprecedented.

Messrs Rolls-Royce, Ltd, opened their first branch in India at Bombay in 1911, and the rapid development of their trade in that country necessitated two removals into successively larger premises. Their establishment in Cumballa Hill

is now the headquarters for India, and there are branches at Delhi, opened in 1920, and in Park Street, Calcutta, opened in 1921. At each of these places the company's activities are under the supervision of trained Europeans with a plant capable of undertaking the largest overhaul work. Very large stocks of Rolls-Royce spare parts are also carried. The company have no fewer than seventy experts employed in their sales and service organisations in India. As far as possible the service system is run on the same lines as that in operation in England, though adapted to the enormous distances which have to be covered, and the lack of proper facilities for effecting repairs away from the large cities.

There are some hundreds of Rolls-Royce cars in India. They are very popular amongst the ruling princes, one of whom owns no fewer than twenty-three of them, being the largest owner of Rolls-Royce cars in the world. Many of these famous vehicles in the Indian States are used solely for shikkar purposes, and it has been found that when employed for hunting they are the only cars which will stand up to the exceptional treatment engendered by having to go across country where there are no proper roads.

Amongst the impressive assortment of Rolls Royce cars in the company's familiar premises in Bombay is one of the first four-cylinder cars that were built in 1905, and was second in the Tourist Trophy Race in the Isle of Man of that year. Its magnificent engine runs as faultlessly as ever, and the car is being used by the company for general service purposes.

The company's general manager for India is Mr M H Fenn. The cable address is "Rolls royce," Bombay, and the codes used are the Motor Trade and the A B C 5th edition.

W H BRADY and CO, LTD, Royal Insurance Building, Churchgate Street

AMONGST the founders of the great cotton-mill industry of Bombay were Messrs W H Brady and J F Bradbury, both Lancashire cotton spinning experts and engineers, who started business in partnership together in 1893 under the style of Bradbury, Brady and Co. Notwithstanding keen competition, their intimate and practical knowledge of the actual requirements of the industry enabled them to make steady progress and to carry out extensive contracts for the designing and complete equipment of several large cotton mills in Bombay city and the mofussil. In 1901 they were appointed managing agents of the Colaba Land and Mill Co, Ltd, to resuscitate its failing fortunes, which were at that time at a very low ebb. So well did they achieve their purpose in that connection that the Colaba Land and Mill Co, Ltd, soon became what it is to-day, one of the best undertakings of its kind in Bombay.

The success of that undertaking led the firm to purchase the partially burnt out property of the City of Bombay Manufacturing Co, Ltd, with the

object of rebuilding the mill and installing new machinery. In the same connection they formed the New City of Bombay Manufacturing Co, Ltd, which likewise has been very successful.

In 1911 Mr Brady retired from the firm, and while the latter operated under the name of Bradbury and Co, as general mill agents, Mr Brady, in partnership with Mr (now Sir) Joseph Kav F I S A, M L C, J P, Mr H H Lakin, and Mr W M Johnson, continued his business activities under the style of Brady and Co. That firm was formed into a limited liability company in 1913.

On the death of Mr Bradbury in 1916 the agencies of the mills held by him were transferred to Messrs W H Brady and Co, Ltd. Mr Brady retired from India in 1919.

The progress made by Messrs W H Brady and Co, Ltd, since their incorporation has been considerable. In addition to being managing agents of the Colaba Land and Mill Co, Ltd, and the New City of Bombay Manufacturing Co, Ltd, they act

also in the same capacity for the Empire Dyeing and Manufacturing Co., Ltd., and the Bombay Industrial Mill Co., Ltd. These undertakings give employment to about 11,000 persons.

Messrs W. H. Brady and Co., Ltd., employ a staff of highly qualified engineers, who report on and superintend the installation of machinery plants of every description. The firm are also very extensive importers of machinery and mill stores of all kinds, and have branches at Calcutta, Madras, Cawnpore, 16, John Dalton Street, Manchester, and correspondents throughout the world. Their telegraphic address is "Brady," and the

codes used by them are the A B C 5th and 6th editions and Bentley's.

Messrs W. H. Brady and Co., Ltd., are secretaries, treasurers, and agents for the New Great Eastern and Spinning and Weaving Co., Ltd., managing agents of the Bombay Uganda Co., Ltd. (amongst the pioneers of the cotton-ginning industry in Uganda), managing agents of the Belapur Sugar Co., Ltd., and George Claridge and Co., Caxton Printing Works, one of the largest and oldest printing concerns in Bombay. They are also agents for a very large number of leading manufacturers of machinery and mill stores in Great Britain and the United States.

WILLIAM JACKS and CO, Metal Merchants and Reinforced Concrete Specialists, Neville House, Currumbhoy Road, Ballard Estate

MESSRS WILLIAM JACKS and Co are well known in connection with all kinds of metals, building material and general hardware, and their regular newspaper reports on metal are indicative of their close connection with everything pertaining to that department of trade. They were pioneers in the introduction of expanded metal for reinforced concrete construction, in which they specialise with very noteworthy ability and success, to which many large buildings throughout the Orient bear eloquent testimony. The machinery supplied by Messrs William Jacks and Co is exceedingly comprehensive, and the efficiency of their department for builders' and engineers' supplies has for its primary object the welfare and satisfaction of their clients, thus making sales subservient to the continual effort for the maximum adaptability and utility of every contrivance and material for the purpose for which it is intended.

Messrs William Jacks and Co's head office is at Winchester House, Old Bond Street, London, E C 2. They are also established at 18, Bennett's Hill, Birmingham, and are the proprietors of the business known under the name of William Colvin and Co., Middlesbrough and Glasgow. They are represented at New York under the name of Nicoll and Co., 140, Broadway. It is interesting to note that at one time the late Mr Bonar Law was a partner in the business.

In India, where they have been established for upwards of twenty years, Messrs William Jacks

and Co devote special attention to all railway mechanical supplies, including locomotives, and they have carried through many large contracts in that connection. They have also branches at Calcutta, Karachi, Rangoon, Madras, Singapore, and Shanghai. The manager at Bombay is Mr J. W. Jessop. The telegraphic address is "Astor," and the codes used are Bentley's, A B C, and private.

Messrs William Jacks and Co are secretaries for the Crittall Manufacturing Co. (India), Ltd., and are sole agents for many famous productions, including

- Sentinel Cummel Railcoache, Sentinel waggons
- Sentinel locomotives
- Carborundum wheels
- Expanded metal
- "Eternit" sheets and slates
- Cullender's "Veribest" roofing, "Cullendrite" bitumen sheeting
- Hall's distemper
- Sissons paints etc
- Crittall steel windows
- Lead wool packing
- Firth's tool, steel drills, files etc
- Page "Lion" fencing
- Armco-Calco products, Armco corrugated culverts, Armco corrugated sheets, Armco black sheets, Armco innerled sheets
- Collapsible gates
- Tonks' fittings
- White Portland cement
- "Winget" concrete block machines
- "Ferrocrete" cement
- Boeman & Karun's paints

GEO SERVICE and CO, Iron, Steel, and General Merchants and Contractors, Sohrab House, Hornby Road

When the business of Messrs Geo Service and Co was established in 1890, Bombay was very different from what it is to-day. With the exception of Government buildings, educational and other public institutions, most of its structures were crude and haphazard, and had been built before the advent of the modern utilisation of steel in building construction. In the great metamorphosis that has since occurred in the city Messrs Geo Service and Co have played an important role by their supply of iron and steel of all kinds

In steel beams they specialise to an extent that makes them one of the leading firms in that connection in Western India.

Messrs Geo Service and Co are agents for several well-known British manufactures, including the celebrated Ruberoid roofing. The managing partner is Mr A. M. Reith, O B E, L R I B A. He is also a partner in the firm of Richardson and Cruddas, who act as managing agents for Messrs Geo Service and Co. The firm's telegraphic address is "Metallic" Bomba.

**RICHARDSON and CRUDDAS, Engineers, Contractors, etc , Byculla Iron Works,
Nesbit Road Iron Works, Bombay Metal Mart**

THE history of this well-known firm goes back to the year before the Indian Mutiny, when Mr Noble Richardson, a Gynside engineer, began operating in the compound of his bungalow at Bombay, a small foundry in which the modelling boxes were ordinary packing cases. But the castings were good and the work done exemplified the skill of the master hand, for everything was under Mr Richardson's immediate personal supervision, and he himself worked harder than any of his employees. Ten years later he was joined by his second son, Mr William Richardson, also an English trained engineer. The latter and his brother Noble became partners with their father under the style of Richardson and Co. In 1880 they absorbed the business of Messrs Nicol and Co. on the Parel Road. Mr John Cruddas of that company was also taken into partnership, and the present title was then assumed. Mr Cruddas, however, only remained a member of the firm until 1882, when he retired from India.

The founder, Mr Noble Richardson, died in 1904. His son William, after fifty years in the business, retired in 1921. The present partners comprise the latter gentleman's two sons, Mr H. L. Richardson, O.B.E., M.I.C.E., and Major George Carr Richardson (late R.A.), D.S.O., M.C., also Messrs H. G. Pirrie, H. H. Bowack, A.M.I.C.E., and A. M. Reith, O.B.E.

The development of the business was accompanied by corresponding expansion and improvement in the firm's establishments. The chief of these is the Byculla Iron Works, where not a few of the contrivances are of the firm's own invention, and the entire equipment, operated throughout by electricity, is an impressive demonstration of the amazing power and precision of modern machine tools in connection with the manipulation of metal of all kinds for purposes innumerable.

Throughout India, from Landi Kotal to Cape Comorin, from the Sind desert to Mandalay, Messrs Richardson and Cruddas have left their impress. Railway bridges, cotton mills, tea factories, erection works, etc., testify eloquently to their facilities and resources and the comprehensive nature of their undertakings. With them were entrusted the contracts for the steel and cast iron used in the construction of the Simla Secretariat, the home of the Viceroy of India for the last quarter of a century, and the neighbouring Army Headquarters. Amongst many massive railway bridges on the military railways built by Messrs Richardson and Cruddas is the Connaught Bridge at lonely Chakdara, a bridge of five spans of 150 feet each, which carries a strategic railway line, a monument of engineering skill, in the forts and blockhouses, all with their machicolated galleries, their emplacements and their armoured gates and their loopholed doors from the firm's works at Bombay, guarding British soldiers and keeping the wild tribesmen at bay. The grim Khyber,

famous for its tragic memories, was during the Afghan War provided with water supply service tanks of special construction of a total capacity of 375,000 gallons—all from the Bombay works of Messrs Richardson and Cruddas.

In railway bridge construction in India the firm have played a leading part. Passing over the railway bridges on the military railroads, the Maratolock Railway and the North-Western Railway, for instance, we learn that the bridge piers were sunk on the well curbs supplied by Messrs Richardson and Cruddas, and not one of the State railways and company-owned lines but has had its well curbs designed and sent out from Bombay. Foremost amongst these bridges are the Kistna River Bridge and the Godavari River Bridge at Rajamundry, in Southern India, for which not only the well curbs but the caissons of considerable size were supplied. These well-known railway bridge works were carried out by the famous engineer, Sir Francis Spring, C.I.E., M.Inst.C.E., and are among the finest examples of bridge work in India. And under the magnificent bridge thrown across the Mahi River, on the B.B. and C.I. Railway, spans of 350 feet, lie the huge double octagonal well curbs, sunk to 60 feet below the river bed—also the work of Messrs Richardson and Cruddas.

In Burma, Ceylon, and Malaya their skill in railway work is well demonstrated. Special machinery is required for the sinking of these ponderous wells, with their massive built piers, and the patent dredgers used, designed by that eminent engineer, Mr J. R. Bell, who was immortalised by Kipling as "the Bridge Builder," have for many years been manufactured by Messrs Richardson and Cruddas, to whom the patentee handed over the sole rights. The largest of the Bell dredgers, of which six in all were constructed, was of 100 cubic feet capacity. It was manufactured to the order of Sir Robert Gales, M.I.C.E., when he was Engineer-in-Chief on the Sara Bridge construction over the Ganges, one of the greatest feats of bridge engineering in India.

Irrigation, which has benefited India more than any other country in the world, has been well served by Messrs Richardson and Cruddas, who make a special study of its wants as examples of their work in India testify. Most ambitious of all, perhaps, is that on the frontier—at Mardan, in the Swat Valley. There the firm have erected some gigantic siphons nine feet in diameter—twin tubes about two thousand feet in length, which ran down the nullahs and up again to carry the waters from the Swat Canal and irrigate an enormous area.

Both the Presidency and the City of Bombay have found in Messrs Richardson and Cruddas a firm who have co-operated with them to their advantage. In the development of Bombay the firm have naturally taken a very important part and will no doubt continue to do so.

In connection with the recent extensions to the Alexandra Dock, the steel work for all the warehouses, totalling 12,000 tons, was supplied and erected by Messrs Richardson and Cruddas. The bridge over the creek at Kalyan, consisting of ten spans, each of 100 feet, with cast iron piers six feet in diameter—standing in some places seventy-six feet above bed rock level—the whole structure and sub-structure were manufactured in Bombay and erected by the firm. The Mazagaon Dock workshops, built to the order of Messrs MacKinnon, Mackenzie, and Co., to carry out repairs to the P and O and British India fleets, workshops covering an enormous area which may be numbered amongst the most up-to-date to be found anywhere in Asia—these also were the work of Messrs Richardson and Cruddas.

In the development of electrical engineering, too, Messrs Richardson and Cruddas have taken a leading part. The modern power and boiler houses of the Bombay Electric Supply and Tramways Co. and their well-arranged workshops at Kingsway, Dadar, and Bombay, covering in all an area of nearly 200,000 square feet, afford evidence of the firm's work. And in one of the finest of all Indian industrial enterprises, the Tata Hydro-Electric concern, there is also the handiwork of Messrs Richardson and Cruddas, for the steel power house which provides the motive power for so many of the Bombay mills, with its massive

100-ton crane runaway, was designed and manufactured by them. The towers for the transmission of cables, carried across the Thana creek on massive cast iron cylinders sunk deep into the silty bottom, also came from the foundries of the firm.

During the Great War Messrs Richardson and Cruddas rendered invaluable assistance to the victory of the Allies by their manufacture of munitions as well as engineering necessities. Flung across the River Euphrates, at Gurmat Ali, beyond Basra, there is a pontoon bridge 750 feet in length across which troops and munitions poured, and out of the firm's workshops went implements of war, many and varied.

An entire volume could be devoted to the things which Messrs Richardson and Cruddas have done, are doing, and are prepared to do, but this necessarily brief sketch is probably sufficient to indicate the prominence and influence of the firm in the economic development of India.

The telegraphic address of Messrs Richardson and Cruddas is "Ironworks," and the codes used by them are Western Union—5-letter, Bentley's, and A B C.

The corresponding London firm is that of Richardson and Hewett, 101, Leadenhall Street, E C 3.

Messrs Richardson and Cruddas are proprietors of the business of George Service and Co., Sohrab House, Hornby Road, and have a branch at Madras.

WEST END WATCH COMPANY, 49, Esplanade Road

THERE is an atmosphere redolent of intellect and responsibility about the avocation that provides mankind with a competent and reliable substitute for the sun itself as a chronological recorder, and that compels wholesome respect which even the advent of the cheap watch cannot dispel. For the era of the cheap watch cannot entirely obliterate the traditions which have come down from the hoary past, when the consideration of every cog and wheel in timepieces was a distinct index to the cunning of the master craftsman.

Such reflections may well arise in contemplation of the business of the West End Watch Co., whose uncommonly handsome retail establishment is such a noteworthy contribution to the shopping attractions of Hornby Road. That establishment is the largest and finest of its kind in the city, and a worthy and fitting place for the display of the great assortment of high-class timekeepers with which the West End Watch Co. are so inseparably associated. The company are not concerned in any way with the cheap and unreliable watch that is so common everywhere throughout the world. The cheap watch, like cheap shoes or cheap clothes, is but money wasted—a source of annoyance and continual reproach to the aesthetic sense. The company have no fewer than 200 different models of watches and each is an example of the superlative in time-keeping efficiency and artistic

appearance. Throughout India and elsewhere they are in use by many thousands of people to whom time accuracy is an important matter—people who are sufficiently evolved to appreciate the beauty as well as the intrinsic excellence of watches that operate beyond peradventure and justify pride and pleasure in their possession.

The beautiful and spacious shop contains also handsome silver and electro-plated ware, etc., but watches are the great specialisation of the company, as their title indicates, and in these they have built up the largest business in India. Some idea of the extent of the concern is afforded by the wholesale department on the first floor, where a clerical staff of about fifty persons are employed.

The business was founded in 1888 by Mr A. Amstutz, who is one of the best known commercial men in Switzerland, where he has many interests. It was originally in Alice Building, Hornby Road, whence a few years later it was transferred to No. 373 of the same thoroughfare. Owing to the great expansion it had attained the company moved into the present excellent and extensive quarters in 1926. The company have a branch at 13, Dalhousie Street, Calcutta, and are also established in Boulevard George Faton, Geneva. The firm's telegraphic address is "Horology" and they use 5th edition of the A B C code.

**CROSSLEY BROS , LTD , Manufacturers of Gas and Oil Engines and Suction Gas Plants,
Commerce House, Currimbhoy Road, Ballard Estate**

No name is better known throughout the world in connection with oil and gas engines than that of Crossley. In 1866 the brothers Francis William and William John Crossley established the firm of Crossley Bros for the purpose of producing oil and gas engines. They were the pioneers of the internal combustion engine in Great Britain, and by research and experiment and practical application in their business of the experience derived from the building of upwards of 100,000 engines, have maintained their position as leaders of the industry.

In 1897, on the death of the senior partner, Mr F W Crossley, the firm was formed into a limited liability company under the chairmanship of Sir W J Crossley. Shortly before the death of Sir W J Crossley in 1911, his eldest son, Sir Kenneth I Crossley, accepted the position of chairman, which he holds to this day.

Messrs Crossley Bros , Ltd , took a leading part in the development of the motor car. In 1906 this section of their business became too large to be carried on as a department, and was formed into a separate company, Crossley Motors, Ltd , Gorton, Manchester, makers of the famous Crossley car under the chairmanship of Sir Kenneth I Crossley.

As all the space available at the works of Messrs Crossley Bros , Ltd , at Openshaw, Manchester, had been built upon, and further expansion was imperative, a plot of forty-eight acres of land was acquired at Heaton Chapel, Stockport, upon which new branch works were erected.

In 1919 the shares of the Premier Gas Engine

Co , Ltd , of Sandiacre, Nottingham, a firm specialising in the construction of large gas and oil engines, were acquired by Messrs Crossley Bros , Ltd . They also took over in 1923 the works of the Sanderson Tractor and Implement Co , Ltd , of Bedford, a firm specialising in the construction of tractors and other agricultural implements.

The aim of the house of Crossley is to build and sell the highest class products, to maintain and, if possible, increase the reputation they have acquired during sixty-two years' work and by large production to offer their goods at the lowest prices.

The firm's productions have been in popular use in India for decades, and they have had offices there since 1919, these being at Bombay, Calcutta, and Madras. The Bombay offices form the firm's headquarters for India, and the general manager for that country is Mr H D M Hayward.

The business of Messrs Crossley Bros, Ltd , in their motor cars in India is chiefly with the Government for military purposes. They are also contractors to the Government in their other lines, and have fulfilled many large and important contracts in connection with industrial plants of every description throughout the peninsula. Their staff includes twelve qualified engineers whose duties in the solution of problems for the most economic ways and means of operation on behalf of the firm's clients take them all over India. The firm's agents at Lahore are Messrs B Kashyap and Co , and at Rangoon Messrs Darwood and Co. The telegraphic address at Bombay is "Gasengine," and the code used is the A B C 6th edition.

**E I DU PONT DE NEMOURS and CO , Manufacturers and Importers of Dyes, etc ,
Jacob Sassoon Building, Rampart Row**

THE great business of Messrs E I du Pont de Nemours and Co is one of the oldest undertakings in America, where it was founded by a French family in 1802, when Napoleon was altering the map of Europe. Little did that family dream that nearly one hundred years later their business would prove one of the most potent factors in modern progress, and contribute to the victory of France and her allies in the most stupendous war of all time. Messrs E I du Pont de Nemours and Co manufactured 40 per cent of the explosives by which that victory was made possible, and during the terrific struggle they employed no fewer than 70,000 persons in their factories, which number about 50 altogether in various parts of the United States. The headquarters, however, are at Wilmington, Del. The following companies are associated with it:

Associated Securities of Canada, Ltd
Du Pont Building Corporation
Du Pont Cellophane Co
Du Pont Engineering Co
Du Pont Fibersilk Co
Du Pont Nitrate Co

E I du Pont de Nemours & Co of Penna
E I du Pont de Nemours Powder Co
Flint Varnish and Colour Works, Inc
Hotel du Pont Co
Rokeby Realty Co
The Play House Co

Furthermore, Messrs du Pont de Nemours and Co are amongst the largest holders of shares of the vast business of the General Motors Corporation, which manufactures the Buick, Oakland, Cadillac, La Salle, Pontiac, and Chevrolet cars, the Yellow Taxi, and the GMC trucks. The capital of that company runs into nine figures, and both companies combined form the largest industrial undertaking in the world. The chairman of each is Mr P S du Pont. Messrs E I Du Pont de Nemours and Co have also large holdings in the United States Steel Corporation.

In 1924 they opened an office at Bombay for the sale throughout India of dyestuffs. The general manager for India is Mr Charles S Rowe. The telegraphic address is "Dupontdyes," Bombay, and all the standard codes are used.

JEWELLERS, LTD , Yusuf Building, Corner of Churchgate Street

In these days of rapid and great fluctuations in international exchanges and the value of commodities, one of the best and most satisfactory forms of investment of capital is undoubtedly jewellery, and when jewellery is referred to in connection with the trade of Bombay mention of the business carried on under the appropriate name of Jewellers, Ltd, is a natural sequence. The work of this firm in everything pertaining to the manufacture of jewellery is an eloquent justification for their uncommon title. Visitors to Bombay desirous of securing artistic examples in every form of jewellery will do well to visit the firm's attractive establishment. Diamonds, rubies, emeralds, sapphires, and other precious stones are there displayed in cunningly devised rings, bracelets, pendants, earrings, brooches, etc., in choice and original designs that speak much concerning the skill brought to bear on their production.

The firm are also watch and clock makers, and their stock of time-pieces is likewise very extensive—time-pieces that may be depended upon for all time, whether for the wall, the table, the pocket, or the wrist. Anyone who wants a good watch is sure to be suited by Messrs Jewellers, Ltd, who keep many different kinds. In the firm's workshops behind the front shop are employed highly skilled men, each a specialist in his own particular job. The range of operations include not only the manufacture of jewellery and repairs of all

kinds, but also electro-plating, gilding, bronzing etc.

Messrs Jewellers, Ltd, were incorporated in 1920 as the amalgamation of two old established



CHURCHGATE STREET CORNER, SHOWING PREMISES OF JEWELLERS, LTD

firms, Messrs Janson and Scowen and J C Bechtler, Son, and Co. The business gives employment to seventy-five persons, and there are branches of it at Allahabad, Mussoorie, Cawnpore, Lucknow, and Ootacamund. The joint managing directors are Messrs F G Scowen and J H Janson. The manager at Bombay is Mr S Baron. The telegraphic address is "Jansco," Bombay.

WILLIAM GOSSAGE and SONS, LTD , Soap and Chemical Manufacturers, Nicol Road, Ballard Estate

ANYONE who travels much in the tropics will have the names of one or two celebrated commodities of British manufacture always brought to notice. One of these is Gossage's soap, than which there are few articles better known nor more universally used. The writer has seen boxes of the famous soap from Mauritius to Barbados, from China to South Africa, from the Dutch East Indies to Central America. Gossage's soap is specially popular in India. It washes away the grime of strenuous vocations and the stains of the lines of least resistance by night and by day. It is used in the mansions of the wealthy and in the crudest of foliage huts. Dhobies on the banks of many a stream demonstrate its swift efficacy, and the demand for it is so great in some districts as to indicate its utilisation for some other purpose than that of cleansing. In the bazars of Bombay, Calcutta, and other large cities Gossage's soap in bulk is an equivalent for cash, a highly prized collateral that changes hands rapidly with the fluctuations of financial demand and supply.

Gossage's soap has been in popular use throughout the Indian Empire for many decades, and the extent to which its trade eventually developed led the firm to open in 1918 a head office for India at Bombay where some thousands of cases of their

soap are imported weekly. That office attends to the requirements of the firm's agents located as follows: Calcutta Hoare, Miller and Co, Ltd; Madras Wilson and Co; Colombo Hayley and Kenney; Rangoon Bulloch Brothers, Ltd; Karachi Shaw, Wallace and Co; Malabar Coast Parry and Co.

The general manager for India, Burma, and Ceylon is Mr J P Cronin. The manager at Bombay is Mr R E Jardine. Both these gentlemen, as well as the staff of English assistants, travel periodically throughout India, Burma, Ceylon, the Persian Gulf, and Iraq, in connection with the business.

Messrs William Gossage and Sons Ltd are amongst the largest soap manufacturers in the world and their great factories at Widnes and Liverpool, equipped with the most modern machinery, give employment to thousands of people. The firm own a fleet of steamers etc. for the conveyance of raw materials and products between Widnes and Liverpool, Birkenhead and Manchester. So long ago as 1862 they were awarded for their soaps a prize at the London Exhibition of that year and they have since won many prizes and medals for the high quality of their manufactures.

S ROSE and CO , LTD , Importers of Musical Merchandise, Rampart Row

THE principal and oldest music business in Bombay is that of Messrs S Rose and Co , Ltd , which was founded in 1847 as a branch of the similar undertaking established in the same year at Calcutta under the name of Harold and Co , by



PREMISES OF S ROSE and CO., LTD.

Mr Samuel Harraden, father of Beatrice Harraden, the well-known novelist, author of *Ships that Pass in the Night* and other famous works

The business, still carried on under the name of Harold and Co at Calcutta, is the oldest of its kind in that city. During the Indian Mutiny trade in India was utterly disorganised owing to the conditions then existing. The consequent financial strain led Mr Harraden to call a meeting of his creditors, and after the position of affairs had been explained to them, they unanimously agreed to waive their claims until normal times returned. The confidence thus shown in Mr Harraden was rewarded, as, at a later date, he not only paid his debts in full, but also voluntarily insisted upon adding interest at the rate of five per cent per annum from the date of the arrangement.

In the early eighties of last century Messrs S Rose and Co became independent of the parent firm, and in 1904 they purchased the goodwill of the Calcutta house from the executors of the late Mr Harraden, but the business is still conducted there, as already indicated, under the original name of Harold and Co.

In 1922 the firm was formed into a limited liability company. The directors are Mr G D Traylen, London, and Messrs C W Chapman and E E Symes, Bombay.

Messrs S Rose and Co's stock of music and musical instruments is one of the largest that can be found anywhere in the world. They provide all the means for the creation of sweet sounds, whether by the fingers or the breath, the two ways by which the intangible infinity and divinity of music are made discernible to the physical sense. The sonorous drum and the incomparable violin, the serenading guitar and banjo, the thrilling trumpet and the orthodox piano and organ are all procurable from them, together with the latest musical publications and accessories of every kind.

The firm are noted for their skill as organ designers, and they are prepared to submit designs and estimates for the erection of pipe organs of any size and built specially to suit the architectural peculiarities of any church or building. They also contract to erect and perfectly voice any organ in any part of India, and to periodically attend to the instrument after it is erected. The work they quote for is of the highest possible grade based on many years' experience in India. The construction is entirely undertaken in their own workshops thereby saving nearly 50 per cent in the cost of importation and duty to India.

Messrs S Rose and Co, Ltd, are also attaining distinction in the manufacture of pianofortes specially built to withstand the Indian climate. In their workshops behind their familiar premises in Rampart Row a staff of about 100 workmen are employed, and repairs of every kind are there very skilfully executed, all the operations being under expert European supervision.

Messrs S Rose and Co, Ltd, are sole agents in Bombay for Collard, Chapell, Allison, Broadwood, Steinway, Erard, Bluthner, Bechstein, Strohenger, Brasted, and Schiedmayer pianos, the military band instruments of Boosey and Co, and Hawkes and Sons, and "His Master's Voice," Chitophone, and Grippa gramophones and records.

DUNCAN, STRATTON and CO , Engineers, 5, Bank Street

MESSRS DUNCAN, STRATTON and Co have exercised a wide influence upon engineering development throughout India since the formation of their business in 1878, although it has only been known under its present name since 1904. Primarily acting as representatives of English manufacturers of note, they have prevailed upon these latter at all times to study problems from the Indian point of view, with the natural result that these manufacturers, realising the big demand there is in India for first-class manufactures, have given this country increasing attention from year to year.

So well have the firm kept pace with developments in engineering, and so wide is their knowledge of the peculiar requirements of India, that they still maintain most of the agencies with which they first opened in Bombay.

Primarily interested in the machinery required for the growth and treatment of cotton in all its multitudinous variations, it was, perhaps, in this way that the firm first attained their position amongst the premier concerns in Western India. The standard half press and finisher press of India as used even to this day in the baling of the cotton

crops, was evolved by close co-operation between them and Messrs Nasmyth, Wilson and Co, of Manchester

Most of the flour mills in India owe their inception and present prosperity to the close co-operation which has always existed between Messrs Duncan, Stratton and Co and Henry Simon, Ltd, of Manchester Both agents and principals have indeed a working knowledge of each mill, and the service rendered to the flour mills is based to a very large extent upon personal visits of the firm's flour milling expert

In concordance and almost simultaneously with the big improvements in power house design in Great Britain, Europe, and America, Messrs Duncan, Stratton and Co have introduced into India new ideas and new designs which have resulted in power production by the most economical methods obtaining in any portion of the world

Amongst the many noteworthy contracts secured by this enterprising firm may be mentioned the supply and erection of the boiler plant of the Calcutta Electric Power Station, the supply and installation of the entire plant of the Hyderabad

City Mint, the supply and erection of the plant for the filtration and sterilisation of the water supply of Gwalior City with a capacity of $3\frac{1}{2}$ million gallons daily, the Municipal Pumping Station of Nagpur, which is one of the first steam turbine pumping stations to be installed in India

Agriculture, which employs the largest portion of the Indian population, has always occupied an equally important position in the firm's development and application Their activities in this connection both in the small things and the great can be adequately judged by the pre-eminent position now held by the well-known Duncan ploughs so commonly used throughout India, and the firm's present engagement in that important scheme for bulk handling of grain, which is attracting attention all over India

Messrs Duncan, Stratton and Co have now branches at Calcutta and Lahore, and a more close co-operation between the firm and their principals at home has been achieved by the inauguration of a London Office at Sentinel House, Southampton Row, London, W C 1 Their telegraphic address in Bombay is "Hydraulic"

GRAND HOTEL (BOMBAY), LTD, Ballard Estate

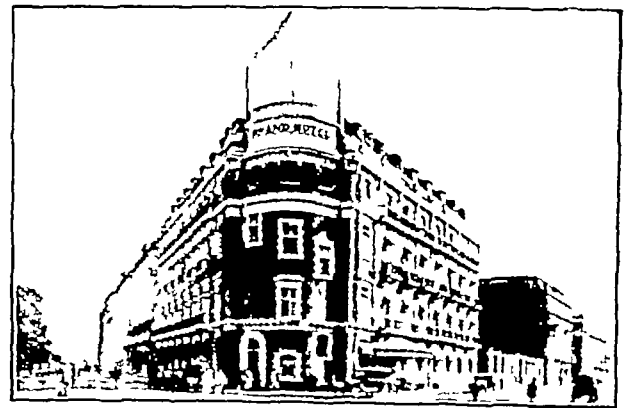
SUITABILITY of position is one of the most important considerations for a hotel, and it is excellently demonstrated by the Grand Hotel That well-known and popular establishment is on the clean and salubrious Ballard Estate, the remarkable new district of Bombay which has been reclaimed from the sea, and which is like a miniature little European city with its handsome office buildings and wide well-kept streets, presenting a vast contrast to the narrow streets and noisy traffic of older Bombay

The Grand Hotel is most conveniently situated, facing the docks, only a few minutes' walk from Ballard Pier, and five minutes from Victoria Terminus, whence the most important mail and passenger trains depart The establishment, which was opened at Christmas, 1922, has seventy bedrooms, and is one of those medium-sized places of comfortable abode that so greatly appeal to people who dislike large and noisy hotels The building has five storeys, including the ground floor, and with its handsome dining and grill rooms, lounge, etc., was planned for the maximum of coolness and ventilation This is well exemplified by the great open space or "well," in the interior, extending from the ground floor to the lofty roof Fastidious regard for the best possible attainments in ventilation and lighting is also manifested by the manner in which the bedrooms are arranged They are very nicely and comfortably furnished and all of them have, of course, electric fans, lights and call bells All rooms have hot and cold running water, besides their adjoining bathrooms and thoroughly up-to-date sanitary arrangements are installed throughout

Probably the most popular attraction of the Grand Hotel is the excellence of its cuisine and

wines, which are always extremely varied and liberal, and well calculated to please the most exacting tastes

The hotel's own orchestra plays every evening during dinner and after, and every Friday evening



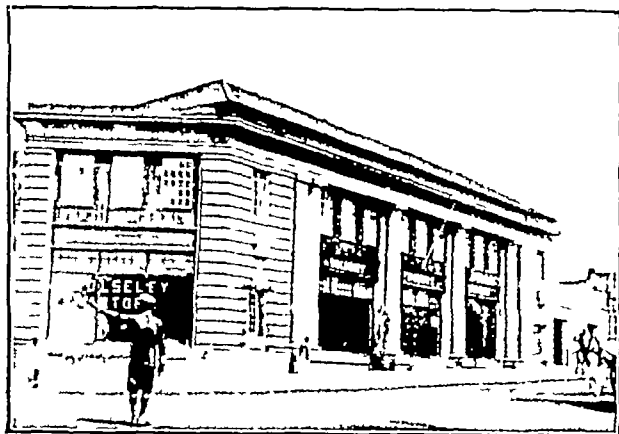
GRAND HOTEL

there is a dance in the quaint fan-shaped palm court The Grand Hotel has also its bar and billiard room, hair-dressing saloon for ladies and gentlemen, and wireless installation on the ground floor Refrigerating plant, wine cellars and a first-class English steam laundry are in the basement The manager is Mr C Larsen, who is unsparing in looking after the comfort and convenience of the guests Porters and baggage clerks meet all incoming trains and steamers, and personally supervise the transportation of guests' luggage to the hotel

The cable address is "Grandotel Bombay" and the code used is Benthos

WOLSELEY MOTORS (1927), LTD , Sandhurst Bridge Road, Chaupati

OF all the many fine motor showrooms in Bombay there is none more impressive and better-known than that of Messrs Wolseley Motors (1927), Ltd , whose premises on Sandhurst Bridge,



PREMISES OF WOLSELEY MOTORS (1927), LTD., CHAUPATI

occupying an area of 2,500 square yards, and giving employment to about 100 persons, are equipped with an up-to-date plant of machinery for the skilful execution of everything associated with

automobile engineering. These handsome and excellently situated premises were built in 1914 for the original Wolseley company, which went into liquidation in October, 1926, and was then taken over by Mr W R Morris, and reconstructed under its present title. The governing director is Mr W R Morris, and the head office is at Adderley Park, Birmingham.

The original Wolseley company was started in 1895 as the Wolseley Sheep Shearing Co , and that name was changed to the Wolseley Tool and Motor Car Co , Ltd , in 1901. The Wolseley cars soon became very popular throughout the world, and the company's business developed enormously. During the Great War their large works at Adderley Park were utilised for munitions.

Messrs Wolseley Motors (1927), Ltd , have also a branch at Calcutta, and both there and at their Bombay premises is kept a very large stock of spare parts for all the Wolseley cars away back to those produced in 1910. The general manager for India is Mr H S Sayer, and the manager at Bombay is Mr D Harrison. The telegraphic address is "Exactitude," Bombay, and the codes used are Western Union, the A B C 5th edition, Bentley's, and Lieber's.

KODAK, LTD , Kodak House, Hornby Road

No name in connection with photographic materials is better known nor more ubiquitous than that of Kodak, which has become a synonym for photographic materials and especially for cameras. The company so designated has its head offices at New York, factory at Welldstone, London, and branches throughout the world. Kodak House, in Hornby Road, Bombay, is India's largest establishment for photographic materials of every description, and the stock and methods of operation in that interesting and very up-to-date place are certainly most impressive as demonstrating the remarkable inventions of the Kodak Company for the perfection of process and result in everything pertaining to the art in which they are so universally prominent and influential. Year after year the Kodak goods have seemed to reach their maximum in general merit and adaptability, but every now and then they exemplify some new improvement, some clever enhancement of standardised perfection, and now it seems impossible that anything further can be achieved which can contribute in any way to the wonderful simplicity of modern photography and the results that can be attained by even an unskilled operator equipped with a Kodak outfit.

In Kodak House the developing and printing of customers' films and plates and the mounting of the pictures have developed into a very extensive business. That work is performed with great care

and in the most methodical manner in departments equipped with the latest appliances and materials for the highest possible achievement in every phase of photography, including enlargements up to 3 by 2½ feet. The rapidity and accuracy of all the operations are in striking contrast to the slow and crude processes of photography even at the beginning of the present century. The developing departments, for instance, have their own refrigerating plant for regulating the temperature of the water. The average value of the stock necessary to be kept in hand at all times to meet the demands of the business is about four lakhs of rupees, or £30,000, and the goods are in hermetically closed receptacles so as to be immune from any climatic effects, but in order to ensure the absolute freshness of everything the utmost care is taken to avoid any unnecessary inflation of the stock, so that the outgoing are constantly replenished with incoming and the supplies disposed of as speedily as possible.

Kodak House is owned by the Kodak Company, who occupy about 13,000 square feet of floor space on two of its floor storeys and part of the top one. The business gives employment in Bombay to 110 persons. All details of its management are operated on the most scientific principles. Kodak House, Bombay, has been since 1913 the headquarters of Messrs Kodak, Ltd , in India, and is under the management of Mr E Mokler. Another branch, devoted to wholesale and retail trade, is established at 17, Park Street, Calcutta.

JOHN ROBERTS and CO , LTD , Designers and Makers of Furniture, Billiard Table Manufacturers, House Decorators, etc , Hornby Road

FURNITURE to stand the test of criticism must conform to the highest standards of art. Its beauty must embody the eternal art principles recognised by the Greeks and Romans, expressed in the exquisite creations of the Louis and Empire periods—the art that dictated the designs of Chippendale and Sheraton and was laid down as law by John Ruskin and William Morris, art that takes its colour from sunsets, the green of the forest glades, and the glow of autumn foliage, its forms from the lotus leaf and the lily, and its character from the oak tree that outlives the century—art that has an inspiring and refining influence in the home.

A business specialised to raise the interior of homes to beauty and comfort conformable to every standard of modern acceptance is that of Messrs John Roberts and Co , Ltd , in whose well-known and attractive establishment in Hornby Road may be seen an exceptionally fine range of novel and artistic specialties in upholstery and cabinet work, full of interest and instruction as showing the firm's versatility in the trade which they represent so well, and in which they hold the leading position in Bombay. A comparison between the productions of Messrs John Roberts and Co , Ltd , and those of foreign manufacture demonstrates very forcibly the claims of the former in the highest class of workmanship at prices lower than those of similar articles imported from overseas.

The firm devote special attention to the manufacture of furniture to customers' own specifications, and they will copy with remarkable fidelity any period furniture or design, no matter how difficult or intricate.

They employ four European designers whose ability is the result of long experience in every phase of furniture production and artistic decoration. Many of the royal palaces throughout India bear testimony to the excellence of the firm's service and supplies.

At Sewri, in the outskirts of Bombay, the firm have the largest furniture factory in Western India, and employ there about 250 persons.

The business was founded about 65 years ago by Mr John Roberts, the famous billiards champion, and the firm are still as celebrated for the manufacture of billiard tables and accessories as they were before Mr Roberts retired from the business in 1882. Thereafter the firm was formed into a limited liability company. The general manager is Mr H S Hyde, who has been connected with the concern since 1913, and is an authority on everything pertaining to furniture and decoration. Many of the finest examples of the firm's productions have been designed by him, and in the Hornby Road showroom may be seen some of his specimens of period furniture that only an expert could distinguish from the originals.

BENNETT, COLEMAN and CO , LTD , Proprietors of "TIMES OF INDIA," etc , Hornby Road

THE *Times of India* was founded in 1838, with the title of the *Bombay Times*. This paper was at first a bi-weekly, appearing on Wednesdays and Saturdays, and owed its origin in great measure to Lord Metcalfe's action of 1838, which granted freedom to the press in India and encouraged capitalists to embark upon journalistic enterprises. The syndicate which founded it and which received much encouragement from the Governor, Sir Robert Grant, was composed of eleven European merchants in Bombay, Mr (afterwards Sir) Jamsetji Jijibhai, two eminent barristers, and a member of the medical profession. Dr Brennan, Secretary to the Chamber of Commerce, was the first Editor, and was succeeded in 1839 by Dr Henderson, of the Elphinstone College, and for a few months by Dr Knight, of the Bengal medical service. In May, 1840, Dr Buist was specially despatched from Scotland to edit the paper, which during the eighteen years (1840-57) of his tenure of office changed its character considerably and expanded on September 2, 1850, into a daily paper. In December, 1857, Dr Buist resigned his post in consequence of a difference of opinion between himself and the proprietors regarding the policy of the paper during the Mutiny and was succeeded by R Knight who witnessed in 1861 the alteration of the title of the journal to the *Times of India*. In 1863 the editorship was offered through

Sir Alexander Grant, of the Bombay Educational Department, to the famous Oxford scholar, Mr Thomas Hill Green, who, however, was persuaded to refuse the offer by Mr Benjamin Jowett, the Master of Balliol, and for a short period, in



**"TIMES OF INDIA" BUILDING,
HORNBY ROAD**

1863-64, the editorial chair was filled by Mr Louis Jennings who had journeyed to India as special correspondent of *The Times*. Robert Knight's successors were Messrs Martin Wood, Gratian Geary, Henry Curwen, Sir Thomas Bennett, Kt., C.I.E. who had previously been connected with

the *Bombay Gazette*, Mr Lovat Fraser, and Sir Stanley Reed, Kt, K B E, LL D The paper is now edited by Mr S T Sheppard

The original offices of the *Times of India* were located in Maneckji Petit's Buildings (now destroyed), near the end of the Colaba Causeway Thence they were removed in succession to Rutherford Street, Military Square, in the Fort, to Bell Lane, Meadows Street, opposite to what was known till 1905 as the Fort Chapel, and to 2, Churchgate Street From about 1879 to 1898 the offices of the paper occupied a building at the south end of Parsi Bazaar Street, and were removed in the latter year to a building opposite to the Cathedral In 1903 a final move was made to the present *Times* building, specially designed and erected for the proprietors That structure, opposite to the Victoria Railway Terminus, is one of the most spacious structures in Bombay, and covers an area of 7,000 square yards, with a frontage extending to over 300 feet One of its features is a hall with an area of 35,360 square feet, believed to be one of the largest printing halls in the world

In the early days the proprietors contented themselves with printing their newspaper only, but from 1850 onwards they undertook other kinds of printing also In 1901 the first serious attempt was made to produce an illustrated paper in India, and this paper, the *Times of India Illustrated Weekly*, has from that time steadily progressed until now it has the widest circulation of any paper in the East This venture led to the publication of an Annual of which the first number appeared in 1910 *The Times of India Annual* has for some years past been noted for its excellent colour reproductions of paintings of Eastern scenes, and for obtaining contributions from men of distinction, such as Lord Hardinge, a former Viceroy of India, Sir Valentine Chirol, Sir Percy Cox, Lieut General Sir George MacMunn, etc

In 1923 the proprietors, Messrs Bennett, Coleman, and Co, who became a private limited company in 1913, started on a fresh venture by adding an evening paper, *The Evening News of India*, to the list of their publications

FRENCH MOTOR CAR COMPANY, LTD, New Queen's Road

ON page 120 will be found a description of the headquarters of the French Motor Car Co, Ltd, at Calcutta That company, whose business is one of the largest of its kind in the Orient, opened in 1913 their Bombay branch, which is one of the best equipped of the local motor undertakings It employs about 150 persons, and its workshops are replete with up-to-date machinery for repairs and everything pertaining to motor engineering

The success of the company's motor school at Calcutta has led them to open a similar one at their Bombay premises, which has proved a very useful institution and is well taken advantage of, being the only school of its kind in that city

At Bombay the firm are agents for the famous Morris-Oxford and Morris Cowley cars and the Morris commercial vehicles, also the Studebaker and Erskine cars, which are attractively displayed in their large and handsome showrooms A very large stock of spare parts and accessories for these cars is kept by the company, and nothing is lacking in their service or supplies that can contribute in any way to the efficiency with which their business is directed

The manager of the Bombay branch is Mr Frederick E James, A M I A E The telegraphic address is "Diamoto," Bombay, and the codes used are the A B C 5th edition and Bentley's

D B TARAPOREVALA, SONS and CO, Booksellers, Newsagents, Stationers, etc, 190, Hornby Road

THE stranger unacquainted with conditions in India, and visiting Bombay for the first time, cannot fail to be impressed by an inspection of the huge assortment of books which Messrs D B Taraporevala, Sons and Co find it necessary to keep in hand to meet the exigencies of their continually growing business Unlike some other large book stores in India, the extent and contents of Messrs D B Taraporevala, Sons and Co's premises are not seen at a glance, because of the many sections in which they are arranged and their ramifications at the rear The world's output of books is there represented, but English and American volumes predominate chiefly A large proportion are on India and Indian themes Educational and devotional works are equally in evidence By every mail the stock is replenished with the latest publications, and there is no best seller of past or modern times that is not obtainable

from this enterprising firm One section is devoted exclusively to rare and valuable books now out of print and highly priced first editions of famous works, and has probably no duplicate in India

Messrs D B Taraporevala, Sons and Co transact a considerable trade also as newsagents, and there is no periodical in the world which they are not prepared to supply regularly to order They are likewise stationers, etc

The business was established in 1864 under the name of Hormusji, Sorabji and Co, and carried on as such until the end of the nineteenth century when it assumed its present designation The proprietors are three brothers, Messrs F B, V D and H D Taraporevala The firm have a branch in the Taj Mahal Hotel Their telegraphic address is "Bookshop," Bombay, and the code used is the A B C

NORTHERN ALUMINIUM CO , LTD , Exchange Building, Sprott Road, Ballard Estate

ALL the aluminium factories in India import aluminium in the form of discs and ingots as there is no undertaking anywhere in that country where the aluminium ore undergoes the preliminary processes that convert it into the beautiful material which now enters so largely into the formation of a vast number of things of every day necessity, and is especially in India revolutionising ways and means that had been unchanged from time immemorial. Forty per cent of the aluminium discs and ingots thus imported into India is through the medium of the Northern Aluminium Co , Ltd , of Canada, which is connected with the Aluminium Co of America, both these companies representing the greatest combination in the world for aluminium products.

The story of the development of the latter is one of the most impressive chapters in the history of scientific invention and industry, and begins in 1886 when Mr Charles Martin Hall discovered the process of reducing aluminium by means of electricity, and lowered the price of the metal within the reach of all. Thus was the aluminium era inaugurated.

The head office of the Northern Aluminium Co , Ltd , is at Bush House, Aldwych, London, and they have branches throughout the world. The Bombay branch was established in 1922. The telegraphic address there is "Noraluco," and Bentley's complete phrase code is used.

**ARDESIR B DARUKHANAWALLA, Agent for SIMPLEX CONDUITS, LTD ,
8, Ravelin Street, Off Hornby Road**

MESSRS SIMPLEX CONDUITS, LTD , are general manufacturing electrical engineers and wholesale electrical suppliers, but they have become famous throughout the world as manufacturers and suppliers of the "Simplex" steel conduit system, the ideal protection for electric wiring for lights, fans, lifts, motors, and other purposes, ensuring immunity from losses by fire as well as being a reliable safeguard against injury or death to electricians and other persons.

The "Simplex" system for the efficient encasement of electric wiring circuits consists of a combination of smooth-bore tubes or conduits having the exterior and interior surfaces finished with special flexible, rust-proof enamel or electro-galvanised material, which is used in conjunction with malleable cast-iron fittings and accessories. This combination of substances forms a complete system of which the various parts have been designedly prepared with the object of meeting the requirements of electric installations of a high-class character suitable for every possible purpose. The numerous kinds of fittings required in connection with this conduit system and manufactured by the company at their extensive works in Garrison Lane, Birmingham, are the outcome of expert knowledge gained during upwards of twenty-five years' study of installations in every part of the globe. During that period a very great impetus has been given to conduit wiring of installations, and in no commercial branch of electrical industry have developments been more marked, and in no other branch were they more necessary.

The Simplex system—pioneer of its kind—was designed with the view of giving to electric wiring the maximum mechanical protection combined with the cheapest "erected" cost and adaptability for all descriptions of work, in fact, it provides for the efficient 'earthing' and 'electric continuity'.

the two greatest possible safeguards against all kinds of risks.

The company's factories, erected in Birmingham in 1905, cover an area of several acres in extent, and they are adequately equipped with modern machinery and plant, while the several buildings



**ELECTRICAL SUPPLIES IN PREMISES
OF ARDESIR B DARUKHANAWALLA**

include a foundry, workshops for annealing, the making of core and patterns, sand-blasting, and enamelling, together with a number of large cupolas fitted with air blast driven by electric motors.

In addition to the very large output of "Simplex" appliances the company are wholesale suppliers of requisites of all descriptions and of best quality connected with electrical engineering such as cables, wires, flexibles, distribution boards, switches, fuses, lamps, reflectors, shades, heating and cooking apparatus, rad motors, table and ceiling fans, small motors, and many other sundries. The London offices and stores of the company are at 113, Charing Cross Road, W.C.2.

The territory covered by Mr Ardesir B Darukhanawalla for representing the interests of Messrs Simplex Conduits, Ltd, are the Bombay Presidency and Northern India, comprising Baluchistan agency, Rajputana, Central India agency, Central Provinces, Punjab, North-West Frontier Provinces, Kashmere, as also the Madras Presidency, including the native states of Travencore, Cochin, and Hyderabad



**GOLD MEDALS AWARDED TO
SIMPLEX CONDUITS, LTD**

Mr Ardesir B Darukhanawalla started in business at Bombay with Simplex Agency in 1903, and in order to gain experience and make himself more conversant with modern practice in electrical engineering, he has paid visits to Europe, where he came into contact with the leading manufacturers of his own particular line. He has (in the name of the firm of which he is the sole proprietor) carried out, under his own supervision, during the past twenty-four years, large electric installations on the Simplex system in cotton spinning, manufacturing and milling concerns, offices, bungalows, and residential quarters. Valuable business connections have been formed by him in London, Paris, and New York, as an importer of electrical

machinery, pneumatic tools and plant, workshop appliances, mill stores, non-corrosive paints, bitumastic enamels, solution, and other goods

In 1901 Mr Darukhanawalla was nominated as an Associate of the Institute of Electrical Engineers in London. In 1904 he was appointed by the Bombay Fire Insurance Association as one of their experts to examine and report upon electric installation. In the same year he was awarded a Gold Medal for the very efficient manner in which he had carried out the lighting at the Bombay Industrial and Agricultural Exhibition, and at the same time he was presented with a gold watch and chain by the Exhibition Committee. The name of his firm is registered in the books of the Royal Indian Marine Dockyard of Bombay, Bombay Port Trust, Government Public Works Department, Great Indian Peninsula Railway, Bombay Baroda and Central India Railway, North Western Railway, etc, etc

In 1906, Mr Darukhanawalla was called upon to fill the chair as head of the Electrical Engineering and Physics Department in the Victoria Jubilee Technical Institute, Bombay. The principal and the honorary secretary have testified to his discharging his duties to their entire satisfaction

Mr Darukhanawalla is also agent for the Edison Accumulator Co, of Berlin, manufacturers of the nickel iron alkaline cells, which are largely in demand in various Government Departments. The Great Indian Peninsula Railway placed orders for these Edison accumulators with Mr Darukhanawalla for Rs 25,000 within about a month of his being appointed agent for the Berlin firm

One of his business friends in introducing him to another business house, said "He is a Parsi of very great standing and education, is absolutely a man of the highest morals and principles, and in every respect trustworthy and straight forward." Owing to his London and Continental connections various business propositions are received by Mr Darukhanawalla from time to time, and are vigorously handled by him as opportunities offer

KAHN and KHAN, Importers of Piece-goods, Jehangir Wadia Building, Esplanade Road

THERE are very few French firms in Bombay, so that the distinction which Messrs Kahn and Kahn have attained in local commerce is all the more enhanced by the comparative absence of French competition in the city. Their head office is at 7, Rue Drouot, Paris, and they have important branches in London and at Lyons, Calcutta, Delhi, Karachi, Cawnpore, Amritsar, Ahmedabad, Nagpur, and Lahore, as well as at Bombay. The business was established about fifty years ago at Paris, and a few years later the firm initiated their

trade in India, where they are well known and esteemed. Messrs Kahn and Kahn are large importers of piece-goods, and more especially of fancy English and Continental cotton and Swiss embroidery. With the exception of Madras Presidency, they are sole distributors in India of the famous Michelin tyres. The manager at Bombay is Mr W L Lengacher. The telegraphic address is "Bonito," Bombay, and the codes used are A B C 5th and 6th editions and Bentley's

ASQUITH and LORD, LTD , Ladies' and Gentlemen's Outfitters, etc , Hornby Road

No establishment in Bombay provides more interesting and accurate indications of the prevailing modes in the clothing of ladies and gentlemen than that of Messrs Asquith and Lord, Ltd , which is centrally situated in Hornby Road, the principal local shopping thoroughfare, opposite to the tower of the Bombay University. Its handsome windows, always artistically dressed with choice samples of the firm's stock, as well as the beautifully appointed interior, are a continual source of attraction and guidance to everyone in the city desirous of keeping *en rapport* with the latest novelties and styles of authoritative decree in that connection. The premises were completed for the firm in 1916, as their former place had become inadequate for their requirements. But in the old premises the long dresses, the great hats, and the other vanished modes of Edwardian and Victorian times also allured delightfully, and there must still be persons throughout India and in lands far from it who recall with interest and pleasure the important rôle which the firm played in their dress schemes of long ago. Throughout the intervening decades Messrs Asquith and Lord, Ltd , have always been noted for the high-class character of their assortments and workmanship and their accurate interpretations of the dress fashions of Paris and London. To-day a visit to their attractive emporium reveals, in all its departments, the same fastidious regard and discriminating selection for the superlative that has ever been characteristic of their activities. In the various sections devoted to feminine require-

ments are dresses which are dreams of loveliness in silk, crêpe-de-chine, charmeuse, and all the fabrics that modern ideals demand, charming costumes, especially adapted for travelling on land or sea, beautiful lingerie trimmed and fashioned as daintily as the most fastidious taste may desire, and millinery rivalling Nature in its production of chromatic beauty, while the designs of the hats are as varied as the materials of which they are made.

The firm employ expert dressmakers and milliners, whose interpretation of each customer's desires is the outcome of ability that can only be acquired through long experience of a clientele exceptionally particular and accustomed only to the best.

Equally noteworthy are the departments for gentlemen's outfitting, where similar good taste as well as completeness is manifested, and it is no exaggeration to say that a gentleman may find there as excellent an assortment for his complete outfit as may be found anywhere in the West End of London.

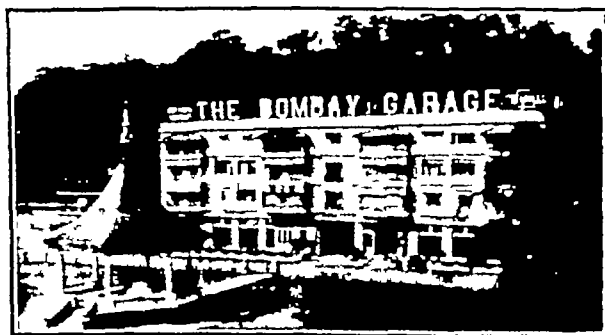
The business was established in 1870 by the gentlemen whose names it bears, and who have long been deceased. In 1900 the firm was formed into a limited liability company. The managing director is Mr R K Gillard, and the manager Mr T V Asquith, a son of one of the founders. Branches of the concern are established at Poona and Delhi. The telegraphic address is "Asquithco."

F M CHINOY and CO , THE BOMBAY GARAGE, Chaupati Radio House, Apollo Bunder

Nowhere in Asia is there a motor engineering undertaking situated in more charming surroundings and with more up-to-date equipment than that of the Bombay Garage, which nestles at the foot of the beautiful Hanging Gardens and faces the Bandstand and sea at Chaupati. The entire *ensemble* of that interesting and impressive establishment bears in all its details the impress of careful regard for the superlative in ways and means, in men and machinery. Each department is under the control of a partner of the firm. In that place of cleverly co-ordinated effort nothing is wanting that can contribute in any way to the maximum of service and satisfaction and the enhancement of the excellent reputation which the enterprising proprietors have attained in the industry which they represent so efficiently. Messrs F M Chinoy and Co were the first sole agents for Shell petrol in the Bombay Presidency, and started business in 1904 in a very small way. Success, however, soon followed their venture, and twelve years later their operations had developed to an extent that necessitated the leasing of the Wellington Mews which became a petrol distributing centre, and in 1915 a motor concern under the name of the Bombay Garage. Another establishment was also opened by the firm in

Apollo Bunder, which in 1918 was reconstructed and enlarged and an automobile lift was added, so that cars could be stored in the upper floors.

In 1926 the magnificent premises at Chaupati were constructed and a plant of machinery installed



THE BOMBAY GARAGE.

for the handling of 100 cars for complete overhaul at one time. The machine shop is equipped with the latest machinery for the grinding of cylinders, the manufacture of pistons, gudgeon pins and

rings, crankshaft truing, remetalling of bearings, etc. A large stock of steels is kept by the firm for the manufacture of all kinds of gear, and the work throughout, under the supervision of highly skilled motor engineers, is equal to the best produced in Europe and America.

The showrooms are uncommonly handsome, and cover an area of 10,000 square feet. The cars displayed there are those for which Messrs F M Chinoy and Co are sole agents for the Bombay Presidency, viz, the Lanchester, Chevrolet, Armstrong Siddeley, Vauxhall, Oakland, and Pontiac. Very extensive are their resources in spare parts and accessories for these celebrated vehicles, as well as for all leading makes of cars, the stock being arranged in a system that enables the firm to see at a glance the number of any particular items they have in hand.

Messrs F M Chinoy and Co are sole distributors in the Bombay Presidency for the famous Bosch magnetos, sparking plugs, lighting and starting sets, spotlights and horns. They are owners of the Deccan Motor Service, Ltd, of Poona, which is under the control of Mr D F Chinoy, one of the partners. That company runs a first-class motor service to Mahabaleshwar, Panchgani, Wai, Wathar, Satara, and other dis-

tricts round about Poona. It has a large workshop for motor repairs, also showrooms where the cars represented by the firm are displayed.

During recent years Messrs F M Chinoy and Co floated two of the most important radio companies in India, viz, the Indian Radio Telegraph Co, Ltd, and the Indian Broadcasting Co, Ltd. In 1922 they obtained the representation of Messrs. Marconi's Wireless Telegraph Co, Ltd, as their agents for external communications, and soon succeeded in creating a favourable atmosphere for the establishment of an Indian company, with a strong Indian board of directors, for the purpose of radio communication between India and the United Kingdom. The Beam Stations of the Indian Radio Telegraph Co, Ltd, were completed last year, and messages have since been transmitted.

Messrs F M Chinoy and Co have the honour of appointment to H E the Right Honourable Sir Leslie Wilson, P C, etc, Governor of Bombay, and are under the distinguished patronage of H H Sir Shri Rajaram Chatrapati Maharaj, G C I E, Maharaja of Kolhapur, and H H Aga Sir Sultan Mahammad Shah Aga Khan, G C S I, G C I E. Their telegraphic address is "Friendship," and the codes used by them are the A B C 5th edition, Bentley's, Marconi, and private.

HERBERT LEVINSON and CO, General Merchants and Manufacturers' Representatives, Central Bank Building, Esplanade Road

IN the offices of Messrs Herbert Levinson and Co in Central Bank Building work is being done that is worthy of proclamation from the house tops. There cannot be any greater achievement than that which prevents pain and illness, heals disordered physical conditions, and maintains the body and, therefore, the mind, with all that is implied thereby, in the finest possible state. Messrs Herbert Levinson and Co are doing that by their enterprising activities in connection with their excellent agencies. These include Marmite, which has a literature of its own, contributed to by many of the leading scientists, medical authorities, professors, and thinkers of the day. The 19th century saw the birth of Marmite, the product of intensive scientific research and experiment. The 20th has seen its renaissance and the fullest justification of its extraordinary food value. Its vitalising property supplies in the most concentrated form the essential Vitamin B, which is either entirely lacking or not contained in sufficient quantities to sustain vigorous health in the ordinary food we eat. Marmite is extracted from brewers' fresh yeast, and retains the whole of the Vitamin B in which yeast is known to be so rich. While Marmite has a positive nutritive value in itself its chief function is the marvellous effect it has on other foods it meets in the course of the digestive processes, releasing as it were their pent-up energy, so that they deliver to the body all their value.

A great amount of food eaten, especially meat and fish, needs the presence of certain necessary

substances of vegetable origin if there is to be perfect assimilation and digestion. Marmite provides these substances adequately and agreeably. It is not the amount of food eaten, but its assimilation that is of greatest importance.

Marmite is the purest of pure foods, rich in nitrogenous substances and mineral salts, and is made from an especially rich quality of yeast. In appearance it resembles a rich beef extract, is tempting and extremely palatable, gives to young and old, man and woman, renewed vigour, increasing ambition and energy, doubles the physical and mental capacity and ensures freedom from superfluous fat.

The Lister Institute of Preventive Medicine has demonstrated that Marmite is many times richer in Vitamin B than any other foodstuff known to science.

The London "Lancet" of December 10th, 1921, states that it is a most powerful but wholly natural stimulant to the body, and an important aid to digestion, assimilation and body building. It also states that yeast contains Vitamin B in the greatest concentration, and palatable preparations made therefrom can compensate for the lack of Vitamin B in other foods. No ill effects have been ascribed to too great a consumption of foods rich in Vitamin B, and it is likely that certain cases of vague ill-health would be improved by additional quantities of Vitamin B. Marmite keeps indefinitely, and its flavour and food value are not harmed by exposure or age. It is used for making and enriching

soups, stews, sauces, gravies, savouries, etc. A small quantity spread on bread and butter, or in the form of a sandwich, makes an appetising and savoury meal.

The introduction of Marmite into India is specially noteworthy as an absolute cure and prevention of Beri-Beri, which has been impressively demonstrated by experiments in connection with British troops suffering from that dreaded disease.

Messrs Herbert Levinson and Co are also agents for the celebrated "Old Smuggler" whisky of the Stirling Bonding Co, Ltd, Glasgow, and London. That delectable liqueur is guaranteed ten years old by the distillers, and is one of the few whiskies of equal age in the market at the standard price. It is considered by expert connoisseurs unsurpassed for its high quality, which is eloquently substantiated by its great popularity in the most exclusive clubs throughout India. A liqueur whisky blended by the same house is bottled in the old Haig four pinched decanters, and its popularity is greatly increasing.

Special mention must also be made of the shaving soap, talcum powders, tooth paste, and general toilet requisites manufactured by the J B Williams Company of Glastonbury, Connecticut, U S A, for which Messrs Herbert Levinson and Co are also agents. The Williams Company are the largest manufacturers in their line of supplies in the world, and their productions are likewise in large and growing demand throughout India.

JOHN FOWLER and CO (INDIA), LTD, Manufacturers of Agricultural Machinery, Locomotives, Steam Road Rollers, Concrete Mixers, etc, Fowler Building, Goa Street

The name of Fowler is well known all over the world in connection with machinery for mechanical cultivation, especially by means of the cable system, first developed in 1850 by the late Mr John Fowler. Equally famous is this name as applied to road-making machinery, road transport machinery, and light railway plant produced by Messrs John Fowler and Co (Leeds), Ltd, who were established in 1850, and in whose works at Leeds thousands of people are employed. That firm are contractors to the British, Colonial, and foreign Governments, and have branches throughout the world. No trouble is spared by the firm to ensure perfection in design, material, and workmanship, as is evidenced by the remarkably long service of their productions. Instances of this are afforded by a set of steam ploughing tackle, sold to Queen Victoria in 1872, which is still at work in the Royal farms at Windsor, and another set, sold to the Duke of Sutherland in 1873, which is now doing valuable work on a sugar plantation in the Hawaiian Islands.

The firm's organisation enables them to keep in touch with the latest developments in all countries, and no possible means of advance or improvement is allowed to pass by uninvestigated, whether for the manufacture of their standard machines or for developing new types. By this means they make it

Other agencies held by Messrs Herbert Levinson and Co comprise the following:

Milton Proprietary, Ltd

Kia-Orr, Ltd, of London, Sydney, and Melbourne, manufacturers of the celebrated fruit essences of that name.

Harry Peck & Co Ltd, North London, manufacturers of table delicacies.

Scott & Turner, Ltd, Andrews Liver Salt.

Kraft & MacLaren, London, Canada, and the United States, cheese manufacturers.

Sterns, Ltd, petroleum products.

Johnston, Bird & Co, Glasgow, sauces.

Ronuk, Ltd, Brighton, sanitary polishes.

Stoddard & Hansford, table delicacies.

Tebbutt & Co, Stilton cheese and plum pudding.

John Latham & Sons, provisions.

Frank Cooper, Ltd, marmalade.

Hugon & Co, Manchester, food products.

Be Ze Bee Honey.

Pistereio, Ltd, Zandam Holland, Pinster Cheese.

The business of Messrs Herbert Levinson and Co was started in 1921 by its proprietor, Capt Herbert Levinson, formerly of the Indian Army, and has undergone very extensive development. Flourishing branches are established in Stephen House, Dalhousie Square, Calcutta, and the Daily Gazette Building, Karachi. The firm have a large staff of travellers, who are successfully extending their trade throughout the country. An undertaking like the one under notice is worthy of all commendation in view of the beneficial results accruing from its supplies, especially that of Marmite, and it is gratifying to note that the use of that unsurpassed production is constantly increasing in all parts of the peninsula.

their constant aim to preserve and enhance the reputation for reliability and efficiency which the name of Fowler carries into all corners of the world.

Messrs John Fowler and Co (Leeds), Ltd, are represented in India by their subsidiary company, John Fowler and Co (India), Ltd. Before the formation of that company in 1908 Messrs John Fowler and Co (Leeds), Ltd, were transacting trade in India, and there is still in operation in Bihar a set of their agricultural appliances that was delivered in 1882.

The firm's interest in the plant supplied by them does not end when the machinery is delivered and paid for. To assist their customers to get the best results from their plant the Fowler Service Organisation is always ready to give free advice, either by letter or, where possible, by a personal visit from one of their experts. They also keep a staff of experienced workmen ready to send out to assist customers in running their machinery.

The manager at Bombay is Mr D E A G Brown, and the telegraphic address is "Traction". They are agents there for Williams' Wire and Wire Ropes Ltd, suspension bridges and aerial ropeways, and Bamfords Ltd, oil engines, pumps, etc.

CURRIMBHOY EBRAHIM and SONS, LTD , Cotton Spinners, etc

THE great business of Messrs Currimbhoy Ebrahim and Sons, Ltd , was founded by the late Sir Currimbhoy Ebrahim, who established branches at Hongkong, Shanghai, Kobe, Singapore, and Calcutta, and developed a large trade in opium, yarn, cotton, silk, tea, and other merchandise. In 1888 he started the Currimbhoy Mills that resulted in the formation of the present Currimbhoy group of mills, which are amongst the most prosperous, the most important, and the best managed in India, and are as follows

Mills	Capital	Looms	Spindles
The Currimbhoy	22,00,000	1,050	86,804
The Bradbury	24,85,000	662	35,884
The Crescent	15,00,000	1,054	44,688
The E Pabanev	20,00,000	1,054	57,880
Fazulbhoy	18,00,000	1,268	52,256
The Ceylon	12,00,000	538	16,700
The Madhorac Scindia	38,00,000	604	44,320
The Kasturchand	70,00,000	913	82,774
The Mathradas	22,00,000	907	43,596
The Pearl	19,97,000	1,760	49,356
The Premier	19,99,880	472	15,260
The Indore Malwa	20,00,000	1,278	46,414
The Indian Dyeing, Bleaching Works	12,00,000	—	—
The Osmanshahi	50,00,000	396	18,372

Sir Currimbhoy was one of the first great mill-owners to realise the importance of making India largely self-dependent for the cotton fabrics it requires, and he was one of the first who ensured the supply of unadulterated cotton for his mills direct from the area of production, which he effected by the establishment of pressing and ginning factories of his own in Central India

Sir Currimbhoy Ebrahim died in 1924 at the age of 84 years, and has been succeeded by his sons, Sir Currimbhoy Ebrahim (the second baronet, formerly Mr Mahomedbhoy Currimbhoy) and Sir Fazulbhoy Currimbhoy, both of whom, like their greatly esteemed father, have added lustre to the Currimbhoy name, not only by their influential activities in commerce and industry, but also in everything pertaining to public welfare and progress

DUNLOP RUBBER COMPANY (INDIA), LTD , Dunlop House, Apollo Bunder

IN one of the small streets fronting the Taj Mahal Hotel is the large white building known as Dunlop House, headquarters in India of the Dunlop Rubber Co (India), Ltd , which supplies a considerable portion of the motor tyres used in the Indian Empire. From 1898 to 1926 the great Dunlop Rubber Co , Ltd , met the needs and kept pace with the development of road transport in that territory. In July, 1926, however, a subsidiary Indian company was formed, under the name of Dunlop Rubber Co (India), Ltd , which has made excellent progress, with the Right Hon Sir Eric Geddes, G C B , G B E , LL D , as Chairman, and Major-General Sir Reginald Ford, K C M G C B , D S O , J P , as Vice-Chairman and Managing Director

From a humble beginning in the latter part of the last century, with only a depôt at Bombay, the old company extended its activities, embracing Calcutta, Delhi, Rangoon, Madras, Colombo, and Karachi. Under the ægis of the new company further extensions have been made, including a new depôt at Lahore, sub-branches at Nagpur, Gauhati, Lucknow, Mandalay, Bangalore, and Rawalpindi, and with Messrs Pierce, Leslie, and Co , Ltd , of Calicut, distributors on the West Coast, and Messrs John Fleming and Co at Karachi

The total manufacturing capacity of Fort Dunlop, the great " Tyre Town " of the Dunlop Company, on the outskirts of Birmingham, comprising 406 acres and giving employment to 11,000 people is greater in volume than that of all other British tyre factories combined. The company has also factories in France, Germany, Canada, the United

States, Australia, and Japan, and agencies and selling organisations throughout the world

No higher tribute could be paid to the quality of Dunlop tyres than the fact that they are fitted to every well-known British car. Although changes in tyre design are always extremely costly, the Dunlop Company, in pursuance of its policy of providing the best possible tyre value, changes the design when experience and research have shown that change is advantageous. Early in 1927 the company introduced the famous Dunlop Triple Stud Tyre with Buttressed Tread. This type of tread is standardised on Dunlop tyres of the wired type, and thousands of motorists have proved the claims which were made when the tyre was first introduced. The deep tread blocks, of scientific design, mean longer life, the side-wall buttresses mean even added strength, while the tread design generally provides the surest possible road grip under all conditions of usage. The extraordinary popularity of Dunlop tyres means that re-placements can be obtained at almost any garage, and the convenience of this ready supply will be appreciated by every car owner, notwithstanding the fact that the modern cord tyre is of such durability that " accidents " are of comparatively rare occurrence

One of the prominent features of the Dunlop business in India, where good roads are still at a premium, is the service given to motorists. Every motorist is invited to write to the nearest Dunlop depôt whenever information is required regarding tyre equipment. The stock of accessories of every description at the depôts for motor-cyclists and cyclists is also very comprehensive. Rims

and wheels are also made by the company, who are always in a position to convert existing equipments if these are found unsuitable. Furthermore, in Bombay and Calcutta up-to-date Dunlop repair factories have been recently established under direct supervision of European experts for repairs of the company's covers and tubes.

The great development of the company's activities in the manufacture of rubber goods of all kinds has been very noteworthy during recent years. The blue Dunlop Maxfli golf ball, for instance, was appreciated by golfers all over India. The minute care and skill in every detail of its production assured that the ball would, in

golf parlance, "stand up" to the rocky nature and hard soil of the majority of golf courses in India. But the Dunlop aim of perfection has resulted in a new and improved ball—the "Black" Maxfli, and proofs of its exceptionally fine quality are being eloquently demonstrated by the success it has achieved at tournaments everywhere since it was placed on the market.

Then there is the Dunlop stitchless tennis ball, made in England, and the material used is of super-fine quality throughout. The ball was used in various Davis Cup matches in Europe in 1927, and the new improved ball now on the Indian market ranks with the rest of the Fort Dunlop productions.

THE EMPIRE OF INDIA LIFE ASSURANCE COMPANY, LTD , Empire of India Life Building, Hornby Road

THE EMPIRE OF INDIA LIFE ASSURANCE CO., LTD., was established in 1897, and at the commencement occupied one small room in Esplanade Road. For two years this was sufficient, but with a rapidly expanding business larger accommodation was necessary, and in 1899 the company moved to 11, Elphinstone Circle, where it had its head office until 1925, when it was transferred to a large modern building in Hornby Road, situated in the main business centre of Bombay. In commemoration of the purchase of this valuable property the Chairman and Directors were "At Home" on the evening of April 28, 1927, at a reception held there to hundreds of distinguished citizens of Bombay.

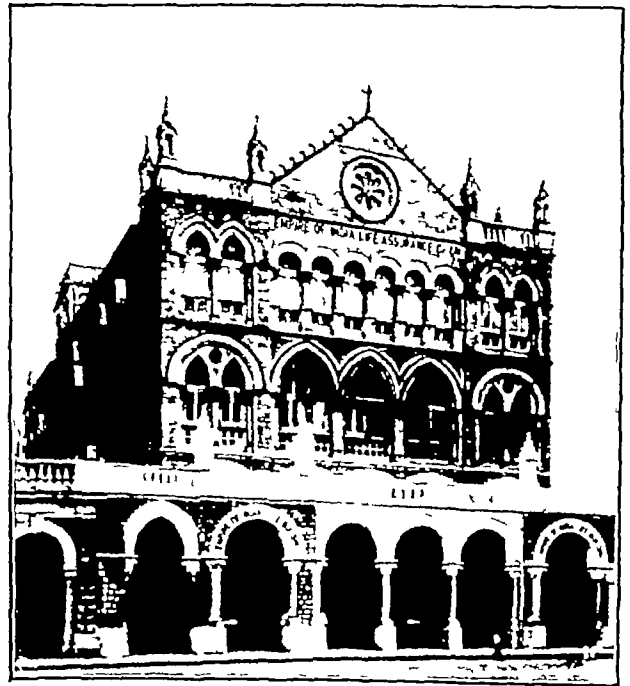
The progress made by the company since its commencement is illustrated by the following figures —

Year ending 28th February	New Policies	YEARLY INCOME FROM		Total Assets
		Premiums	Interest	
	Rs	Rs	Rs	Rs
1898	10,59,000	49,000	2,000	84,000
1902	16,77,000	2,07,000	6,000	3,63,000
1912	62,66,000	16,45,000	1,83,000	58,93,000
1922	70,29,000	28,12,000	8,90,000	1,94,68,000
1927	1,06,44,000	38,94,000	13,90,000	2,95,09,000

A valuation of the company's assets and liabilities is made by the Consulting Actuary every fifth year, and each with-profit policy in force at the date of the valuation is entitled to share in the profits declared to be divisible. The profits thus determined are distributed by way of bonus in the form of a reversionary addition to the sum assured. The bonus vests immediately on declaration, and is payable with the sum assured. The with-profit policy-holders are entitled to 90 per cent of the divisible profits of all the business (non-participating as well as participating) of the life assurance and the annuity departments.

While the bonus record of the company has been consistently good, the bonuses declared as a result of the Sixth Quinquennial Valuation in 1927 mark a distinct stage in the history of the company. The bonus then declared was at the rate of Rs 15 per annum per Rs 1,000 assured on whole life assurances and at the rate of Rs 12 per annum per Rs 1,000 assured on endowment assurances.

As the valuation was made on a much more stringent basis than previously and, in addition, a sum of Rs 11,23,396 was carried to reserve, these results, in conjunction with the exceptionally low



BUILDING OF THE
EMPIRE OF INDIA LIFE ASSURANCE CO., LTD

premiums charged, are all the more noteworthy, and show the financial stability of the company and a degree of strength which augurs well for the future.

The next distribution of profits will take place as at February 28, 1932. In the meantime interim bonuses will be paid at the rates declared at the last valuation.

The company has branches at Ajmer, Bangalore, Madras, Nagpur, Poona and Rangoon, and chief agencies at Aden, Ahmedabad, Allahabad, Calcutta, Colombo, Hyderabad (Deccan), Hyderabad (Sind), Lahore, Nairobi and Surat.

The managers of the company are Messrs. Allum, Bharucha and Co.

THE CONCRETE ASSOCIATION OF INDIA, Telephone Buildings, Home Street

THE uses to which cement concrete can be put are many, but the usefulness of this excellent building material was, and still is, little known in India. It was to supply this knowledge that The Concrete Association of India was started in January, 1927, and since then it has been carrying on intensive work in propagating the uses of cement.

One of the numerous activities of the Association is the publication of a monthly journal devoted entirely to concrete. The success of this journal was marked from the day of its commencement in August, 1927, and is contributed to by the leading engineers and architects in India.

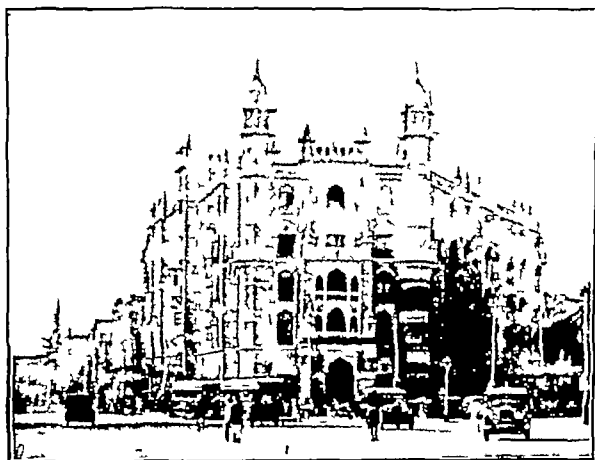
Another side of the work of the Association is the publication of pamphlets in English and vernaculars on various subjects relating to concrete.

Most of these books are issued gratis. Perhaps the most important activity of the Association is the practical assistance and advice given to cement users by its engineering staff.

The present headquarters of the Association are in Telephone Buildings, Home Street, and a branch office has been established under the direction of a District Engineer at E-2, Clive Buildings, Clive Street, Calcutta. Further developments and the opening of branches are expected in the near future. In fact, everything is being done to bring before the public of India the manifold uses of Portland cement concrete, thereby rendering considerable public service in assisting to develop the country.

MAJESTIC HOTEL, Corner of Wodehouse Road and Colaba Causeway

STANDING all by itself at the corner of Wodehouse Road and Colaba Causeway, and facing one of the greatest open districts in Bombay, with the imposing bulk of the Museum and its grounds in



MAJESTIC HOTEL.

the distance, the Majestic is an impressive building, and was built specially for its present purpose in 1909. In view of the climatic conditions and necessities, the greatest care was exercised in the

planning of its arrangements, with the result that throughout the establishment there is the maximum of coolness and ventilation and everything that could be suggested for the comfort and convenience of guests. The Majestic is thoroughly modern in its sanitary arrangements, and marked a great advance upon what had been in vogue in that connection locally. It has ninety-six bed rooms, all nicely and comfortably furnished with hot and cold running water and bathrooms attached. All the floors are connected by two electric lifts. The entrance hall and public reception rooms are also comfortably and pleasantly appointed. The dining room is on the ground floor, and the cuisine is first rate, both in quality and variety. An excellent orchestra plays every evening there after dinner, and on Friday nights there is dancing. The hotel, of course, has its billiard room, and select bar, well equipped with the choicest brands of liquors. The proprietor is Mr. H. D. Bilimoria, and he is also the owner of the Majestic Hotel, Poona, another excellent and popular establishment. The manager is Mr. S. Saunders. Porters from the Majestic meet all liners and railway trains arriving at Bombay, and relieve passengers of the trouble of looking after their luggage.

LIPTON, LTD, Tea, Coffee, and General Import and Export Merchants, Imperial Chambers, Wilson Road, Ballard Estate

THE Bombay branch of the world-renowned firm of Messrs. Lipton, Ltd., looks after their trade throughout the Bombay Presidency and Western India, and is under the management of Mr. H. D. Huggins. The local agencies held are as follows:

California Packing Corporation, San Francisco, Del Monte Products
C. Dressler, Bremen, "Ring" Brand Beer
The Combined Brandy Shippers, Ltd., Cognac, "Double Bell" Brand Brandy
The London Distillery Co., Ltd., London, "Antler" Brand Old Tom and Dry Gin

J. P. O'Brien & Co., Liverpool, "Standard" Brand Guinness Stout
Wilts United Dairies, Ltd., London, Condensed Milk
The Shredded Wheat Co., Ltd., Hertfordshire, Shredded Wheat
Wright, Layman & Umney, Ltd., London, Coal Tar Soap and Specialties
G. Mason & Co., Ltd., London, "O.K." and "Gold Seal" Sauces
Bullock, Lade & Co., Glasgow, B.L. Whisky

The telegraphic address of the Bombay branch is "Liptea," and the codes used are Bentley's and Western Union. The company's Indian headquarters at Calcutta are described on page 75.

**L A STRONACH and CO (INDIA), LTD ,
Advertising Consultants, Cayton House, Frere Road**

Of all the many factors that go to the making up of successful business management none is more valuable than effectual advertising. To neglect the use of this mighty medium is to clog the wheels of fortune and handicap all effort to the point of courting total eclipse by more appreciative and enterprising competitors. The principal advertising consultants in India, and indeed the only firm of that kind there, are Messrs L A Stronach and Co (India), Ltd, who are able exponents of every phase of modern publicity methods, operating on the same lines as those of advertising agencies in Europe and America, and making their activities subservient to any specialised requirements. Their chief medium is the newspaper press, and their expert service includes no fewer than thirteen different languages. They plan and carry through advertising campaigns on any scale, carefully and studiously adapted to the goods dealt with and the peculiarities and idiosyncrasies of the Indian markets pertaining thereto. Their large skilled staff includes clever artists whose pictorial and other workmanship is

displayed in newspapers, magazines, and periodicals of every description throughout the Indian Empire. Thoroughly familiar with local conditions and potentialities, Messrs L A Stronach and Co (India), Ltd, invite inquiries, and make no charge for advice, consequently, to advertisers who are desirous of increasing their trade or creating new demands in India there is no need for the risk of devious experiments, no need for the loss of time or good money, while the skilful services of the firm in question are at the disposal of all who care to profit thereby.

The business was established in 1919 by the managing director of the company, Mr L A Stronach, who is a commercial artist of great experience, and is the only advertising man who has covered the whole of India by car.

The telegraphic address of Messrs L A Stronach and Co (India), Ltd, at Bombay is "Adservice," and they have a London office at 27, Chancery Lane, W C 2, where the telegraphic address is "Seltoindia."

**FORBES, FORBES, CAMPBELL and CO, LTD ,
Merchants and Agents, Forbes Building, Home Street, Fort**

At the close of the 18th and the beginning of the 19th centuries the world was in turmoil, and Napoleon's brilliant military achievements were a serious menace to Great Britain and her overseas possessions. The Mahrattas, too, were threatening to overrun the British settlements in India, including the stronghold of the East India Company at Bombay. It was at this crisis that Mr Charles Forbes, founder of the business of Forbes, Forbes, Campbell and Co Ltd, formulated a scheme for assisting the Government with cash when war and the selfish attitude of the Bombay shroffs threatened the very existence, both militarily and financially, of the British in Western India. When the Company's troops were being beaten back by the Mahrattas, and there was a lack of the vital necessities which go to feed and render mobile an army, Mr Charles Forbes, acting for his own firm and for Messrs Bruce, Fawcett and Co, lent money freely to Government at low rates of interest on the security of standing crops of cotton and teak and sandalwood forests. Mr Forbes paid down cash and took over the produce afterwards. At one time these two firms had lent half a million sterling to Government at rates of interest which were most unfavourable to the lenders as compared with the return obtainable on their money if employed in their ordinary commercial transactions.

The loans extended over two or three years and (in the words of a well-known chronicler of their times) "enabled the war to go on when the war could not have gone on without them and supplied

those sinews which to the hour and the man were essential to its prosecution. Who knows if Assaye could have been fought without them?"

The Forbes loans were the forerunners of the Indian Government public loans, the first of which was issued in 1813.

Mr Charles Forbes was chief of the firm of Forbes, Forbes and Co at Bombay from 1790 to 1811, when he left India for London, where he was senior partner at the head office until his death in 1849. For his eminent services he was created a baronet in the year 1823. During his residence at Bombay he was the most prominent figure in its commercial life. A statue of him was subsequently erected in the Town Hall.

The second Sir Charles Forbes, head of the firm's London house about the end of the seventies, formed a separate concern of his own under the style of Sir Charles Forbes and Co, at Bombay. In the same year he took over the goodwill and offices of the old-established firm of Messrs Leckie and Co, together with the Prince of Wales Press Co, which was subsequently remodelled and transformed into the New Prince of Wales Press Co, Ltd, for whom the present firm of Messrs Forbes Forbes Campbell and Co, Ltd, are secretaries, treasurers and agents.

The old firm went into liquidation in 1870 and in 1894 the name of the firm of Sir Charles Forbes and Co was changed to Forbes Forbes and Co, Ltd, but even to the present day telegrams are delivered in envelopes addressed to "Sir Charles Forbes and Co."

Messrs Ritchie, Steuart and Co, founded in 1816, were amalgamated with Messrs, Forbes, Forbes and Co, Ltd, in 1903, and had been very prominent and influential in local trade

Messrs Forbes, Forbes, Campbell and Co, Ltd, are bankers and general merchants and large importers of all kinds of merchandise, chief among which are Manchester piece-goods, yarn, sugar, metals, and matches, and they export very considerable quantities of Indian produce, raw cotton, hemp, wool, etc. They have also a ginning and pressing factory at Harpalpur, in the district of Cawnpore, and are established at Amritsar,

Calcutta, Delhi, and Karachi. Their head office is at 9, King William Street, London, E C, and they have a branch in Liverpool. In Manchester they are established as Finlay, Campbell and Co, Ltd

Messrs Forbes, Forbes, Campbell and Co, Ltd, are managing agents of the Bombay Safe Deposit Co, Ltd, who have constructed in Forbes Building, Home Street, a number of strong rooms and safes of various sizes, all of which are identical with those found in similar establishments in England and elsewhere

HILL, SON and KNOX, Stevedores and Dubashes, Graham Road, Ballard Pier

THE business carried on by Messrs Hill, Son and Knox is upheld by the greatest of all activities—service for others. The firm do not engage in the buying and selling of merchandise of any kind, but they are very keenly and actively interested in the careful reception and despatch of it for the many people who entrust their affairs in that connection to them. They know by long experience the things that are to be watchfully guarded against in their activities as stevedores and dubashes, and they have been playing a prominent part in such work in Bombay since the formation of their business in 1860. Year after year the efficiency of its organisation and equipment has been increasingly demonstrated, and to-day the facilities and resources at the disposal of the firm are in keeping with the important position which they occupy, and the extent to which their services are taken advantage of. The firm possess a fleet of excellent lighters, and are specialists in handling

heavy materials, for which they have their own blocks and derricks, capable of lifting weights up to fifty tons. To them was entrusted the handling of the heavy materials used in the construction of the Alexandra Dock, and the manner in which they carried through that undertaking gave great satisfaction to all concerned.

The business, as already indicated, was established in 1860, and the original founders have long been deceased. Many changes have naturally occurred in the personnel of the firm, and the present partners are Mr D G Hill, grandson of the founder, and Mr A Bishop, both of whom have been connected with the business for very many years. The firm are appointed stevedores for many well-known concerns, including

Anchor Line of Steamers, Ellerman (Hill & City Lines), Wilson Line, Clan Line, Bates Line, Moor Line, Strick Line, Donaldson Line, Saint Line, T & J Brocklebank Line, T & J Harrison Line, Asiatic Steam Navigation Co, Roosevelt Steamship Co

HUGHES and DAVIES, Consulting Mining Engineers, Metallurgists, Assayers, and Analytical Chemists, etc, 31, Murzban Road, Fort

MURZBAN ROAD is a quiet thoroughfare in a pleasant and select district off Hornby Road, the principal shopping thoroughfare of Bombay. No 31, Murzban Road has the appearance of a private residence, but on the ground floor of that capacious building are the premises of Messrs Hughes and Davies, where a business is carried on that is without duplicate in the city and unsurpassed of its kind in the Orient. In that exceedingly interesting and instructive place are provided object lessons in the utilisation of scientific knowledge in conjunction with remarkable scientific apparatus for the development and enhancement of commerce and industry, as well as for the prevention and alleviation of physical ills. There the ordinary person, unversed in chemistry, inspecting the remarkable equipment of stills, electric furnaces, retorts, scales that weigh very microscopic quantities, and many phials and other vessels containing strange fluids of varied colours, feels at once grossly ignorant and stupid, and observes the highly skilled and concentrated activities in progress there with the respect that is always aroused by

the manifestation of the triumph of mind over matter and the potentialities of the unknown. If any firm are uncertain as to the quality of the goods submitted to them in connection with estimates, etc, they can speedily be enlightened by giving samples for analysis to Messrs Hughes and Davies, whose equipment includes a remarkable contrivance called the Mahler Bomb for testing the calorific property of coal, and a machine for testing cement by pressure up to fifty tons per square inch.

The business was started in 1920 by Lieut-Colonel Hughes and Major J F Davies. The former retired in 1922, and the sole proprietor since then has been Major J F Davies, who is an Australian, and has had thirty-three years' experience as a mining expert. A large amount of his attention is taken up with manganese, chrome, and other ores, and in that connection he travels much throughout India. The firm's telegraphic address is "Assayco," Bombay, and the code used by them is Bentley's Mining Edition.

**W H DEETH and CO , Merchants and Manufacturers' Representatives,
Ajam Building, Ballard Road**

Study of the conditions of trade throughout India, as elsewhere, brings to light many remarkable instances where old-fashioned and costly ways and means are still in vogue, which would be instantly relegated to the limbo of the obsolete if information were imparted in the quarters concerned regarding new and better methods and materials. Messrs W H Deeth and Co represent famous manufacturers whose productions are amongst the oldest and best inventions of their kind in existence. The firm may be regarded as ambassadors of commerce and exponents of the superlative for the maximum of result at the minimum expenditure of time and labour. They specialise in general hardware and engineering lines, plumbing and sanitary fittings, etc., and in these probably the modern urge towards perfect adaptation to the purposes desired is most strikingly demonstrated than in any other articles of industrial output. The business in question was founded in 1921 by Mr W H Deeth, who had been travelling throughout

India as the representative of the United Brass Founders of Manchester during the preceding two years. On his return to England Mr Deeth was successful in securing the agencies of various well-known firms, and he now transacts an important trade throughout the Peninsula as the representative of the following firms:

Newman Hander & Co, Ltd, Woodchester, Glos
G A Harvey & Co (London), Ltd, London
Lewis Berger & Sons, Ltd, Homerton, London
Sheffield Steel Products, Ltd, Sheffield
The Campbell Tile Co, Ltd, Stoke on Trent
Carron Company, Falkirk
Twifords, Ltd, Hanley
L Lumley & Co, Ltd, The Minories, London

Messrs W H Deeth and Co have branches at Calcutta (Norton Buildings), Madras, Karachi, Lucknow, Ahmedabad, Rangoon, and Colombo. The telegraphic address for all the branches is "Berdeeth," and the codes used by them are Bentley's and private.

**FELBER, JUCKER and CO , LTD ,
Engineers, Machinery and Yarn Merchants, Mill Furnishers, etc , 15, Bank Street, Fort**

The Bombay business concerns comprise a very large number that are branches of celebrated firms in Great Britain. Amongst these is that of Messrs Felber, Jucker and Co, Ltd, the well-known Manchester house, founded in 1860 by Mr Jean Felber, and developed so successfully that it was eventually converted into a limited liability company, all the directors and shareholders being British subjects. Messrs Felber, Jucker and Co, Ltd, own steamship companies, timber forests in Sweden, and other patent rights in connection with textile and paper-making machinery and asbestos-cement products. In addition to their head offices in Manchester, the firm have branches in London, Johannesburg, Angsburg, Gothenburg, Vienna, Zurich, Tann (Alsace), and Buenos Ayres.

They have been established in India for about fifty years, and their headquarters there are at 15, Bank Street, Fort, Bombay. They have also a branch at Ahmedabad. At Bombay Messrs Felber, Jucker and Co, Ltd, supply stores of all kinds and machinery, especially textile. They are

also importers of yarns and mill stores, sizing materials, English-make loom and preparation machinery, spare parts, etc. The manager at Bombay is Mr Frederick Chrichton. The telegraphic address is "Felber," Bombay, and the codes used are the A B C 5th edition and Lieber's.

Messrs Felber, Jucker and Co, Ltd, are sole agents in India for

John Hetherington & Sons, Ltd, makers of machinery for preparing, spinning, doubling, winding, and gassing cotton, also wool worsted, silk, and waste yarns
Horsfall & Bickham Ltd, card clothing of all kinds, also allied machines and appliances
William Dickinson & Sons, looms, preparation machinery for cotton, linen, etc
John Hall Bobbin Co, Ltd, established 1805, makers of all types of bobbins for spinning and weaving
"Establishments" J De Tavrre, Lille, specialities French chrome picking bands and stretchless chrome belting
Galloways Ltd, boilers, also mill engines on greatly improved lines, fitted with the latest silent liquid value gear
John Naylor & Son, Ltd, Dudley, manufacturers of English oak bark tanned leather belting

**THE VULCAN INSURANCE COMPANY, LTD ,
Jehangir Wadia Building, Esplanade Road, Fort**

An excellent example of Indian insurance enterprise is afforded by The Vulcan Insurance Co, Ltd, which was founded in 1917, and has met with noteworthy success. The capital is as follows:

Authorised	Rs 3,00,00,000
Issued	Rs 1,66,64,700

Subscribed	Rs 1,53,20,700
Paid up	Rs 15,32,070

The chairman is Sir Jamsetjee Jeejeebhoy, Bart, and the managing agents are Messrs J C Sealvad and Co.

C M ROSS and CO., Insurance Managers, York Building, Hornby Road

It is a very noteworthy fact that most insurance business done in India, and indeed throughout the East, forms but one of several departments of the firms therein engaged. Messrs C M Ross and Co, however, provide a very distinctive exception thereto by reason of the fact that they specialise entirely in insurance, and are, therefore, much better calculated to understand every phase of their subject, and provide better arrangements to meet individual and exceptional cases, than mercantile firms whose attention is so much engrossed by other activities that they naturally cannot be expected to exemplify in their insurance work the exceptionally wide as well as minute knowledge and experience so natural a concomitant of Messrs C M Ross and Co's specialisation. The conditions of life and business methods have developed an unprecedented complexity that is continually increasing with the unceasing changes produced by the improvement of mechan-

cal contrivances for business and pleasure. That metamorphosis is accompanied by risks of every description to life and property previously unknown, and in the protection of their clients against these Messrs C M Ross and Co are one of the few firms in Bombay who specialise solely without engaging in other activities. They are certainly very notable insurance experts, and their influence permeates all branches of local trade, covering as it does, fire, life, marine, loss of profits, motor car, horse, burglary, fidelity guarantee, etc., insurance.

Mr C M Ross, the founder of the firm, went to India in 1893, and for many years held the position of manager with the Royal Insurance Co. In 1917 he established his own business, and was joined in partnership in 1918 by Mr A S Chadwick. After the death of Mr C M Ross in 1927 his son, Mr A L Ross, became a partner in the firm.

BROUGH and CO, LTD, Manufacturers' Representatives, 58, Forbes Street

Nothing has been of greater influence in the great changes and development of business during recent decades than the science of advertising. But side by side with the era of printed publicity has been the corresponding growth in the recognition of the personal equation, and it is doubtful whether any device, literary, mechanical, or otherwise, will be evolved to supplant the personal factor in commercial undertakings. The practical application of that principle is one of the distinctive features of Indian trade to-day, and throughout that great land are to be found many Indian and foreign commercial travellers and agents of European and American firms. The practical recognition of the personal equation is the foundation of the extensive business connections of Messrs Brough and Co, Ltd, which was established in 1925, and is the medium through which the goods of many well-known manufacturers in Europe and America are marketed in India. The founder and managing director of the company is Mr T W Brough, who has had about twenty years' business experience in the Orient, and looks after the Bombay offices, which are the firm's headquarters for India. Messrs Brough and Co, Ltd, are also established at 120, Canning Street, Calcutta, and the director in charge there is Mr J E Philpott, who also has had long experience of Eastern

trade. The firm have evolved an excellent selling organisation, not only in the ports mentioned but also throughout India, and handle merchandise of practically every description, with the exception of liquors and radio materials.

Messrs Brough and Co, Ltd, are sole agents in the Bombay Presidency for the printing inks of Mander Bros, Ltd, Wolverhampton, and for the provisions of Maconachie Bros, London. They are sole agents in India for

Three in One Oil Co, New York
The Mennen Co, Newark, New Jersey
O Cedar, Ltd, Slough
W A Sheffer Pen Co, Fort Madison, Iowa
D & W Gibbs, Ltd, London
Burjois et Cie, London
Keystone Manufacturing Co, Buffalo
Richard Hudnut, New York
American Crayon Co, Sandusky, Ohio
Bright Star Battery Co, Hoboken, New York
Aktiebolaget Svensk Rakklunga, Sandviken, Sweden
Wellman, Peck, & Co
Brockway Motor Truck Corporation, etc, etc

The correspondents of Messrs Brough and Co Ltd, are

Louis C M Reed, Inc, New York
Cox Aspdon & Fletcher, Inc, New York
Oscar Fiere & Co, Charleroi, Belgium
E Aylwin & Co, London
Austin Payton & Co, Birmingham
Luft Marck & Co, Hamburg
Caines & Co, Kobe, Japan

SYMINGTON COX and CO, LTD, Importers and Exporters, 58, Forbes Street

MR H SYMINGTON COX, who founded in 1907 the business bearing his name, started in Bombay the trade in artificial silk in 1916. Messrs Symington Cox and Co were formed into a limited liability company in 1916, and are importers of all kinds of machinery, but especially that of cotton and hosiery mills, also yarns, artificial silk, etc. They are representatives of the Mysore Sandalwood Oil

Factory, Bancroft Co, Joseph Stubbs and Co, Evered Co, Keystone Greuse Co, and Stubbs and Parker. Messrs Symington Cox and Co, Ltd, have branches at Calcutta and New York. Their telegraphic address is "American," and the codes used by them are Bentley's, A B C 5th and 6th editions, and Universal Trade

JUPITER GENERAL INSURANCE CO, LTD, Ewart House, Tamarind Lane, Fort

THE JUPITER GENERAL INSURANCE CO, LTD, is the second largest Indian undertaking of its kind in Bombay. It was established in 1919, and has made very satisfactory progress. Its capital is as follows:

Authorised	Rs 2,00,00,000
Issued and subscribed	Rs 1,50,00,000
Paid up	Rs 23,74,800
Total assets	Rs 55,56,676

The head office is at the above address, where also are the offices of Messrs Lalji Naranji and Co, the managing agents. At Calcutta the local managers are Messrs Andrew Yule and Co, Ltd. In the United States the American managers are Messrs Fester, Fothergill, and Hartung, 110, William Street, New York. The chief agencies are as follows: Bombay, Shantikumar N. Morarji and Co, Aden, Joomabhoy Lalljee and Co, Ahmedabad, Sheth Govinddas Maneklal, Baroda, Kantavala and Co, Burma Branch, Rangoon, Cawnpore, Ratilal B. Modi, Ceylon, F. X. Pereira and Sons, East Africa, the Kampala General Agency, Ltd, Karachi, Rameshwardas Banarsidas, and Yusafali Alibhoy Karimji and Co, Lucknow, Gowardhan Prasad Barghava, Madras, Narayandas Girdhardas, Punjab, Gowardhan Das and Co, Great Britain, B. W. Noble, Limited, 73-76, King William Street, London, E.C. 4.

The company transacts all classes of business excepting life and is steadily developing into a strong insurance undertaking, in a country where insurance companies are very few in number. With the national sentiment that is now growing in India more and more business is bound to go into the channels of local companies. The Chairman is Mr Lalji Naranji, J.P., M.L.C. The Secretary and Manager is Mr K. S. Ramchandra Iyer, who is an able exponent of insurance and a very enthusiastic advocate of its extension amongst the people of India. In all movements in that connection he takes a prominent part. He was one of the organisers of the Indian Insurance Companies' Delegation, formed in February, 1927, for the purpose of conducting a general publicity campaign regarding the greater enlightenment of the people of India on the advantages accruing from the placing of insurance business with Indian companies, and has written a very interesting and instructive booklet on that matter. Mr Iyer was also one of the organisers of the Convention of Indian insurance companies held in Bombay in January, 1928. He has travelled widely in Europe and America, where he has studied insurance in all its phases, and keeps *en rapport* with insurance developments throughout the world.

W. A. CHAMBERS and CO, Chartered Architects, Standard Building, Hornby Road, Fort

THE business of Messrs W. A. Chambers and Co is one of the oldest of its kind in Bombay. It was established about 1870 under the name of Gosling and Morris, which was changed in 1903, on the retirement of Mr Morris, to Gosling, Chambers, and Fritchley, when Messrs W. A. Chambers and E. W. Fritchley were taken into partnership. In the year 1906 the name was altered to Chambers and Fritchley, and was continued to 1919, when the present style of W. A. Chambers and Co was assumed. The partners now are Mr A. Bell, L.R.I.B.A., and Mr D. W. Ditchburn, F.R.I.B.A., who are actively engaged in the management of the concern in Bombay, and Mr W. A. Chambers, already mentioned, who resides in England.

The firm of Gosling and Morris and their successors were the architects of many of the large modern buildings in Bombay and elsewhere. The Taj Mahal Hotel in Bombay was carried out under the supervision of Mr W. A. Chambers.

They are also civil engineers as well as architects and numerous mills and industrial establishments of various kinds throughout India bear witness to their ability in that direction. Amongst the buildings planned and erected by them may be mentioned the following:

Hotel Majestic
Dattabhai Mansions
Tatra's Mansion
Hongkong & Shanghai Bank

Allahabad Bank
Standard Building
Army & Navy Stores
Technological Laboratory, Matunga
Wallace Building
Carnarvon Building
Coals Building
St. Andrew's School, Bandra
Taj Building
Whiteaway Ludlow Building
Several buildings on Apollo & Colaba Reclamations
Several buildings for E. D. Sassoon & Co., on Ballard Estate
Sudama House for Mr. Narottam Morarjee, Ballard Estate
A cloth market at Kharadevi for Mr. Narottam Morarjee
Y.M.C.A. and Y.W.C.A. buildings and others on Wellington Times
Mongim Bros. Building
Pathe Freres' Building
"Times of India" offices, Boti Bunder
Killick & Nixon's offices
Turk Club offices, Bxcell
Standard & David Mill's
Currimbhoy Mills
Hukumchand & Ramram Mills, Indore
The Model Mills, Nagpur
The Sholapur Mill, Sholapur
The Muncira Mills, Bangalore
The New Oil Mills, Wadala, Bombay
Western India Match Factory at Ambarnath
The Jacob Sassoon Mills
The Racine Sassoon Mills
The Morarjee Girdhardas Mills, Port
The Kharadevi Mills, Bandra
F. D. Sassoon Mills
And several other buildings in all parts of India.

LAFFANS (INDIA), LTD , Gentlemen's Tailors and Outfitters, Churchgate Street, Fort

MODERN thought emphasises the superlative importance of individuality and the remarkable care exercised throughout all the realms of Nature for its preservation and development. Evolution, in all the professions and in every department of commerce and industry, is inseparably attended by



SECTION OF PREMISES OF
LAFFANS (INDIA), LTD.

corresponding recognition and encouragement of individuality, and the undertaking which best exemplifies it and rises accordingly above the dead level of ordinary procedure and achievement is well calculated to be successful. Individuality in tailoring, for instance, is no easy achievement. In the midst of overwhelming similarity of ways and means, of fabric and workmanship, the qualities of individuality, of the personal equation expressed in fastidious regard for the minutiae that enter into the consideration of the ordinary maker of clothing, are not always so pleasing and obviously in evidence as in the business carried on under the name of Laffans (India), Ltd.

The establishment of that firm in Churchgate Street partakes not of the character of the great outfitting store where the products of mass production are made for the elasticity of requirement

that is satisfied with approximation instead of meticulous measurement and fastidious accuracy, as well as perfection of quality. There are tailors *and* tailors, and the difference between them is quite as great as that of the poor work of the inexperienced and untrained aspirant in any other skilled occupation and the exquisite efficiency of the master hand. The impressions given forth by the artistic ensemble of Messrs Laffans' premises are eloquent of their discriminating understanding of the harmony of excellence of appointments with excellence of service and supplies. The assortment of gentlemen's outfitting goods so nicely displayed there is not for the masses but the classes, for those who can appreciate first-class texture and chromatic good taste. The celebrated Henry Heath hats, the Manhattan collars and Hendawick underwear, for which the firm are sole agents in Bombay, are noteworthy amongst many other articles of meritorious regard. The eye of discernment will note with appreciation the large stocks of materials for suits of all kinds, from the lightest fabrics for the hot season to an unusually fine assortment of Court attire and for uniforms of every description. In the workrooms at the back about twenty persons are employed. Messrs Laffans (India), Ltd, have the honour of appointment to H E the Right Hon Sir Leslie Wilson, P C, etc, Governor of Bombay.

The business was originally started by a syndicate under its present name, and was taken over in 1923 by Mr W Blackmore, under whose direction it has become one of the most noteworthy undertakings of its kind in India. Mr Blackmore has been engaged all his life in the tailoring trade. He received his training with well-known firms in London and Edinburgh, and in 1907 proceeded to Colombo to fill an important position with Messrs Cargill and Co, described in the Ceylon section of this book. Thereafter he joined Messrs Hoar and Co, of Bombay, and remained with them until 1923, when, as already indicated, he became the proprietor of Laffans (India), Ltd.

PATEL BROTHERS, Cotton Brokers, etc, "Gulestan," 6, Napier Road, Fort

In 1905 Mr Pestonji Dhunjibhoy Patel, an enterprising young member of the Patel family, started, in collaboration with his younger brother, Mr Rustomji Dhunjibhoy Patel, and a Greek gentleman, Mr J N Dellaporta, well experienced in the cotton trade, a small cotton business in the name of Dallaporta and Patel. That business, now known as Patel Bros, is very prominent and influential, and one of the foremost cotton concerns in India.

The main activities of the firm at first were confined to jetha and brokerage business. In addition, they acted as the exclusive house brokers to the premier cotton firm in India, Messrs Ralli Bros, until 1918, when they relinquished that

position owing to the greater expansion of their own affairs.

In 1914, on the retirement of Mr Dallaporta from partnership, the business was conducted solely by the two brothers under the name of Patel Bros, till 1918, when, with a view to its still greater development, two Greek gentlemen, Messrs J P Calvocoressi and A J Calfopoulo, previously with Messrs Ralli Bros, and long experienced in the cotton trade, became partners. The firm then did their own buying of cotton in up-country markets, and buying agencies, now numbering about a hundred, were opened all over India. A larger proportion of the cotton bought up country was exported to the Continent and

China, and the export was so developed that within the short period of five years the firm occupied a prominent place in the list of large shippers.

The enterprising Mr Patel, senior, seeing greater opportunities ahead for further developments, floated a private limited liability company in partnership with Messrs E D Sassoon and Co, Ltd, of Bombay, under the style of The Patel Cotton Co, Ltd, with a capital of Rs 25,00,000. That company took up all the ready and export business of Messrs Patel Bros, the latter thereafter confining themselves once more to brokerage and commission business.

Mr P D Patel was the first managing director of the newly floated company, but died a year later, on February 1, 1924, at the age of 54. After his death his four sons, Messrs Minocher

P Patel, Sorab P Patel, Behram P Patel, and Jehangir P Patel, joined the firm, and are now active partners with their uncle, Mr R D Patel.

In December, 1923, the late Mr P D Patel was elected a member of the New York Cotton Exchange, being the first Indian to receive that honour, and after his death it was conferred on his younger brother, Mr R D Patel, who is also an Associate Member of the Liverpool Cotton Exchange and Managing Director of the Patel Cotton Co, Ltd.

The palatial building known as "Gulestan," containing the firm's offices, was built in 1921, and was owned by the late Mr P D Patel. The firm's telegraphic address is "Patelbros," Bombay, and the codes used by them are the A B C 6th edition, Meyer's Atlantic Cotton code 40th edition, and private.

SULZER, BRUDERER and CO, Empire of India Life Building, 216, Hornby Road

In Switzerland when a partner in a firm retires or dies, the name of the firm must be altered accordingly, and that curious law renders it impossible for the Swiss firms to attain the distinction of long and unbroken nomenclature that is so highly prized in other countries.

The business of Messrs Sulzer, Bruderer and Co, for instance, was established in the nineties of last century under the name of Steiner, Briner and Co, and thereafter, through the change of partners, became successively known as Steiner, Hegerle and Co, Hegerle, Sulzer and Co, and finally Sulzer, Bruderer and Co, the partners now being Mr A Sulzer, Mr A Bruderer, and Mr Max Frei.

Messrs Sulzer, Bruderer and Co's headquarters are at Zurich, and they have branches at Delhi, Cawnpore, Amritsar, and Karachi, as well as at Bombay. The manager at the latter port is Mr Geo Niederer.

The firm are large importers into India of English and Continental goods, and specialise in the celebrated Swiss embroideries, which no other nation can rival. They are agents for Continental manufacturers of spinning, weaving, and knitting machinery. Their telegraphic address is "Turicum," Bombay, and the codes used by them are the A B C 5th edition and Bentley's.

THE AUTOMOBILE COMPANY, LTD, 5-12, Queen's Road

The records in the possession of the Commissioner of Police, Bombay, indicate that motor cars were first licensed in Bombay in the year 1904. The approximate number of motor cars in the Bombay Presidency, including Sind, registered at the end of March, 1927, was 16,300. This great development has been accompanied by corresponding increase in the number of motor engineering establishments in that city, and one of the largest and best of them is that of The Automobile Co, Ltd, which gives employment to 200 persons. The premises, occupying an area of 90,000 square feet, are admirably situated in Queen's Road, and the arrangement and equipment of the different departments demonstrate the best ways and means for the speediest and most skilful workmanship. In some garages the operations are carried on without related sequence, and much time is lost and corresponding expense incurred by the haphazard incompleteness of the methods employed and the lack of co-ordination. The Automobile Co, Ltd, are however, fastidious about details that apparently unimportant are in the aggregate of superlative importance. Each workman is a

specialist at his particular job. All their work is subjected to the most scrupulous inspection by European overseers, and nothing is allowed to leave the premises not up to the highest standard of achievement.

The Automobile Co, Ltd, were the first to introduce into Bombay the Duco system of paint spraying, and also road pumps. They have been established since 1911, and after considerable experience as agents for some well-known cars they are now concentrating their service and supplies on the Chrysler and Austin cars and International trucks for which they are sole agents in Western India. Their stock of spare parts for these vehicles is of an average value of two lakhs of rupees, and nothing is left undone by the company that can contribute to the convenience and satisfaction of their customers.

The managing directors are Mr R Ricardo who is one of the founders and Mr A R Wadia. The telegraphic address of the company is "Autoline," Bombay, and the codes used by them are the A B C 5th edition and Bentley's.

**MONGINI, LTD , Manufacturing Confectioners and Caterers,
Churchgate Street and 13-15, Tamarind Lane**

THE handsome premises of Messrs Mongini, Ltd , occupying an area of 7,200 square feet in Churchgate Street, are the finest of their kind in Bombay. In that popular place for light refreshments of every kind confectionery is seen in a variety that well justifies the fame of the business for its high-class productions. The Mongini manufactures



SECTION OF PREMISES OF MONGINI, LTD

are not to be regarded in the category of the commonplace and the ordinary. They are the result of Mr Mongini's life study and practice of the confectionery trade in all its phases. He began that work as a youth with his uncle, who owned the Hotel de Paris at Tarragona, Spain, and after varied experience with important confectionery firms, he started business for himself in 1901 at Bombay. His venture was at first naturally on a moderate scale, but his productions became very popular, and year after year his

trade developed, so much so that in 1919 the present company was formed, with Mr Mongini as managing director, in order to provide better facilities to meet its expansion. It was then that the fine establishment in Churchgate Street was constructed.

The factory is in Tamarind Lane, and is excellently equipped with modern machinery. Amongst the many artistic and delicious articles produced there are cakes for weddings, birthdays, and other festive occasions. These are made in a great variety of sizes and styles, from dainty little specimens up to magnificent ones weighing 100 pounds and more. Although exceedingly elaborate in their decorations, they are so cleverly packed that they arrive at their destinations throughout India quite undamaged. Needless to say, only the finest ingredients are used in their manufacture. The same remark applies to all the firm's productions, which gained silver and bronze medals at the Bombay Exhibition of 1917. The factory is complete in every detail, including a department for the manufacture of the boxes and other receptacles in which its output is despatched.

Messrs Mongini, Ltd, are also the largest caterers in Bombay. Their facilities and resources in that connection are very great, and include enormous quantities of glass and chinaware, silver, electro-plate, cutlery, etc. To them is entrusted the catering for many of the principal social events in Bombay. They have the honour of appointment to H H the Maharaja Gaekwar of Baroda, and they also had a similar appointment to Lord Wallingdon, a former Governor of Bombay. The firm's telegraphic address is "Mongini," Bombay.

**FRIED, KRUPP, A -G (GERMANY) W H MARTIN, Resident Engineer and
Representative in India, A Karim Building, Graham Road, Ballard Estate**

AMONGST the world's best-known industrial names is that of Krupp, which before the Great War was a synonym for war materials, and the undertaking so designated was the greatest of its kind in existence. At the time of the Armistice it was employing 150,000 men. Since then Messrs Fried Krupp, A -G, who now employ about 60,000 hands, have been producing all kinds of machinery for peaceful purposes and have branches throughout the world.

Their important interests in India are looked after by their Resident Engineer and Representative, Mr W H Martin, who has been established in that capacity since 1925. The firm specialise in India in oil-mill machinery of every description, particularly oil expellers, but they also supply

Steel hydraulic and hammer forgings
Iron and steel castings
Chilled castings
Railway plant of all kinds
Diesel engines
Steam turbines
Crushing machinery

Equipments of cement lime, and road metal works,
and for chemical industries
Salt mills
Bruising and grinding mills
Coal dust firing plant
Ore dressing machinery
Magnetic separators for ores, ashes, refuse, etc
Roasting, smelting, and refining furnaces
Rolling mills for iron, steel, copper, aluminium, and
all other metals
Sugar cane mills
Machines for sisal hemp, and coffee cherries
Rubber mills
Hydraulic baling presses
Cranes, coal and ore handling plants
Capstans tipping platforms
Hoists, hydraulic lifting jacks
Agricultural machinery
Cream separators
Steam and motor driven ships, tugs, barges, pleasure
yachts

Mr Martin's telegraphic address is "Scientific," and the codes used by him are the A B C 6th edition and Mosse.

NEW INDIA ASSURANCE CO, LTD (OF BOMBAY, INDIA), Esplanade Road

THE New India Assurance Co, Ltd (of Bombay India), was established in 1919, and its capital is as follows

Authorised	Rs 10,00,00,000
Subscribed	Rs 5,93,42,125
Paid up	Rs 1,18,68,425

The business of the company is conducted with enterprise and ability, and it is the largest fire, marine, and accident insurance undertaking in India. It has an important representation in London, under the control of Sedgwick, Collins (Agencies), Ltd, for fire and general business and the Commercial Union for marine business. It

has also branches throughout the Far East and in various other districts, including the United States of America. The branches in India are at Calcutta and Madras, and it has agencies in that country at Ahmedabad, Alleppey, Amalner (Khandesh), Calicut, Cochin, Coimbatore, Karachi, Marmagao, Mangalore, Poona, Quilon, Wardha (C P), and Rangoon. The Chairman of the company is Sir Dorab J. Tata, Kt, and the General Manager is Mr R. J. Duff. The telegraphic address is "Niasurance," and the codes used are the A B C 4th and 5th editions, Murray's 2nd edition, and Bentley's.

E STELLA and CO, Importers of Pharmaceutical Products and Rubber Goods

PROBABLY the first evidences of the potentialities of the human brain were the efforts made to prevent and ameliorate pain and illness. The old myths of the Egyptians and the legends of the more virile northern races are filled with the efforts to reduce to rule and system the incomprehensible evolution of vitality. As the world grew older a more settled existence made a more detailed examination of the wondrous products of the earth possible, and the alchemist of the early ages became the predecessor of the pharmacist of to-day. The search for the philosopher's stone and the *elixir vitae* was futile so far as its immediate goal was concerned, but it taught a lesson in alchemy and compound substances from which has resulted the enormous variety of pharmaceutical products such, for instance, as those imported by Messrs E. Stella and Co., which embrace the entire output of scientific and medical knowledge in that connection. Since the commencement of their activities in 1914 Messrs E. Stella and Co. have been careful to deal only in the highest class of materials, and excellent demonstrations of these are afforded by their periodical, published under the title of the *Cult of Galen*, wherein exceedingly interesting and attractive information is given regarding the various specifics which is of particular utility to medical men, who are enabled thereby to keep in touch

with all advances and improvements in connection with the prevention and cure of pain and illness. Four doctors are employed by Messrs E. Stella and Co. in their pharmaceutical activities, and they are agents for the following well-known concerns:

D. L. Zimbletti, Milan
H. K. Mulford & Co., Philadelphia
Neobios, Rome
Laboratoire M. Robin, Paris
I. N. M. Ph. Serono, Rome
Istituto Terapeutico Romano, Rome
Boulinger Druisse, Paris
Lepetit Farmaceutici, Milan
Burnham Iodine Co., New York
Smith, Stanistreet & Co., Calcutta
Lotoi
Pearson's Antiseptic Co., London
Laboratoire Midy, Paris

In 1921 Messrs E. Stella and Co. turned their attention to the importation of all kinds of rubber goods, and their trade in these has developed very greatly. They are agents for the famous productions of Messrs Pirelli, whose head office and works are at Milan, Italy, and who have branches throughout the world.

The founder and proprietor of the business is Mr E. Stella. The telegraphic address is "Stellola," Bombay, and the codes used are the A B C 5th and 6th editions, Bentley's, and private.

WALTER SIGNER and CO

Importers of Piece-goods, Jehangir Wadia Building, Esplanade Road

ZÜRICH the capital of the canton of that name and the most popular and important town in Switzerland, contains the headquarters of practically all the Swiss firms in India engaged in the piece-goods trade. Prominent amongst the firms of that nationality in Bombay are Messrs Walter Signer and Co., who were doing business for years in India before they opened in 1920 their Bombay branch. They are also established at Manchester, Milan (Italy), and have agencies throughout India. Messrs Walter Signer and Co. operate in all the

departments of the piece-goods trade, from the crude materials to the finished articles. Fully 60 per cent. of their trade in India is with the Indian merchants, who find their patterns and quantities eminently suitable to bazaar requirements. The firm's manager at Bombay is Mr J. A. Koss. The telegraphic address there is "Signers," and the codes used are Bentley's and the A B C 6th edition.

Mr Walter Signer, the founder of the concern, resides at Zürich.

HOAR and CO , Court, Naval, Diplomatic, Military, and Civil Tailors, 139, Esplanade Road

IN no country in the world are there richer and more elaborate uniforms than in India, so that the prominent tailoring firms in Bombay and Calcutta especially are called upon to demonstrate much greater and more diversified ability than falls within the circumscribed range of activities in the ordinary sartorial establishments in Great Britain and other western countries. An interesting example in that connection is afforded by the well-known business of Messrs Hoar and Co, which, established in 1879, is conducted with a specialisation in ways and means that is the natural result of the firm's long service as court, naval, diplomatic, military, and civil tailors. The influence which they have exercised as such has permeated throughout the country, from the city business man, fastidious about the cut of his clothes, to the dignified princes of India's great nobility resplendent in apparel beyond comparison. Messrs Hoar and Co have ever been, and are, exceptionally particular about the qualifications of

their workmen, especially their European cutter, and accordingly the firm are known everywhere for their accuracy of fit, as well as the high quality of materials by which their productions are distinguished.

For the convenience of their mofussil customers, representatives of the firm make regular visits to nearly every station in India at stated intervals carrying with them samples of their goods, and register orders and measurements for future requirements. Needless to say, this feature of the business is very greatly appreciated.

The founder of the concern, Mr J F Hoar, died in 1917. He had, however, retired in 1901, and was succeeded in its control by Mr R E Clarke and Mr H G Hyde. The latter died in 1920, and the present proprietor is Mr R E Clarke. The business gives employment in Bombay to about 50 persons, and there are branches of it at Karachi and Quetta.

THE BRITISH INDIA GENERAL INSURANCE COMPANY, LTD. 35-43, Churchgate Street, Fort

AMONGST the many remarkable achievements of modern civilisation there is none probably that is more intimately and influentially connected with every branch of commerce and industry, as well as with every phase of life and its manifold interests, than insurance, which has now a universality of application altogether beyond the narrow limitations of what had been regarded as its greatest possibilities when the science of financial protection against risks and disasters of every kind first exerted its beneficial results on a grateful world. The economic development of everything pertaining to the welfare of the people of India is naturally evinced by the growth in insurance business throughout the country. In 1919 the progressive movement in that connection led to the formation

of The British India General Insurance Co, Ltd, which is all the more noteworthy because of the fact that all its capital is Indian and is as follows: Authorised, Rs 1,00,00,000, issued and subscribed, Rs 1,00,00,000, paid-up, Rs 10,00,000.

The company undertakes insurance of every description, with the exception of life, and the success it has attained may be gauged by a comparison of its first year's premium income, viz., Rs 1,15,490, with that of 1926, viz., Rs 24,99,799.

The company has a branch at Calcutta, and agencies at Delhi, Karachi, Ahmedabad, Rangoon, Kampala (East Africa), Paris, and in London. The Chairman of the company is Sir Cowasji Jehangir, Bart. The Managing Director is Mr H M Mehta, and the General Manager Mr Geo Brown.

MINIMAX, LTD , Feltham House, Graham Road, Ballard Estate

AMONGST the many famous English concerns which have branches at Bombay is that of Minimax, Ltd, whose celebrated fire extinguishers are in popular and growing use throughout the world. That firm, who have their head office and factory at Feltham, Middlesex, are the largest manufacturers of chemical first-aid fire extinguishers in existence. They make special types for all purposes, such as for carriage on motor cars, 'buses, lorries, trains, steamers, aeroplanes, and for use on oil, petrol, or electrical fires. The "Minimax" is so simple in operation and so convenient in size, shape, and weight, that it can be used by anyone. Since the company started business in 1904 up to the time of writing they have sold more than one and a half million extinguishers, which have been the means of putting out 80,000 fires.

Messrs Minimax, Ltd, are contractors to His Majesty's Government, War Office, Admiralty,

and the principal Indian railways and steamship companies. Everywhere in India, as in other countries, their excellent productions are to be seen in wise readiness in all kinds of places, and the numerous disastrous fires which they have prevented in India would make interesting and impressive reading.

The firm have been established in India since 1911, and have branches at Bombay, Calcutta, Madras, and Rangoon, as well as representative throughout India. As a matter of fact, the whole of the country is parcelled out into numerous different territories, which are under the charge of men specially trained by the firm at their factory at Feltham. The company's manager for the East is Mr A Fleming. The manager for Western India is Mr A B Emslie. The telegraphic address for all the branches is "Minimax Ltd," and the codes used are Lieber's and private.

FAVRE-LEUBA and CO , LTD , 217 and 219, Badri Mahal, Hornby Road

THE business of Messrs Favre-Leuba and Co , Ltd , is the oldest of its kind in India. The year in which it was established, 1814, was, like 1914, a very historic one, for it was the year of the defeat and banishment of Napoleon and the conclusion of the war between Great Britain and the United States. Watches of that time, although beautifully made, were exceedingly cumbersome and very different from those of to-day, so that the time-keepers then imported into India by Messrs Favre-Leuba and Co would make very impressive comparisons if it were possible to place them beside the wonderful variety which the firm now supply. Much, indeed, could be written in conjecturing the influence exerted by Messrs Favre-Leuba and Co , Ltd , through the medium of their watches and clocks, which have found their way to every part of the Indian Empire, as well as to other lands. Many supplied by the firm long ago are still giving faithful service, for a good watch is like a good

friend, and changes not with the passing years. Amongst their many varieties is the "Zenith" watch, for which they are sole agents in India, and these have by their reliability and precision attained the highest honours and great fame all over the world. The firm's assortment of clocks is equally comprehensive. At their establishment at 217-219, Hornby Road, which is their headquarters for India, about thirty-five experts are employed in the execution of repairs of every description. The company have a branch at Calcutta, and their factories are at Geneva, the greatest centre of the watch-making industry in the world.

The firm was formed into a limited liability company in 1913. The present managing director is Mr L. Leuba, who has been in the business in Bombay since 1908. The firm's telegraphic address is "Favreleuba," and the code used by them is the A B C 5th edition.

HERANT ODIAN, Importer of Perfumes, Amir Building, Elphinstone Circle

THE interesting business of Mr Herant Odian is not for the masses but for the classes, for the discerning minority able to appreciate the beauty and quality of the artistic things which he supplies. He is sole agent in India for Maison Boucheron, high-class jewellers, of London, Paris, and New York, and the celebrated perfumes of Maison Worth of London and Paris. His office, therefore, is just the place to visit by anyone desirous of obtaining

any articles for personal use or for gifts that cannot fail to be highly appreciated because of their novelty, charm, and intrinsic merit. Amongst his most noteworthy materials are silk, silk underwear, and very beautiful textiles. He is also a dealer in diamonds and precious stones. Mr Herant Odian's telegraphic address is "Odian," Bombay, and the codes used by him are the A B C 5th edition and International de Lugagne.

DUKE and SONS, Manufacturers of Aerated Waters, Grant Road

THE absence of thirst when there is an abundance of assuagements available may be commendable, but is not in the category of joyous conditions. Thirst is pleasurable when there is the wherewithal to quench it like the excellent beverages manufactured by Messrs Duke and Sons in their large and well-equipped factory in Grant Road. No name is more prominently associated with the production of aerated waters in Bombay than that of Duke and Sons. The glass stoppered bottles in thousands of refreshment places throughout the city bear their familiar name, and it is seen also on motor lorries, speeding with their welcome loads for distribution, not only throughout Bombay, but even fifty miles into the country. Messrs Duke and Sons' Grant Road factory is operated on modern principles with an up-to-date plant of machinery, and great care is exercised by the firm throughout the processes of their manufacture. Their bottles are sterilised in solutions of permanganate of potash and cleansed inside and out by revolving brush machinery. The water used passes through Berkefeld filters at a pressure of 35 lbs per square inch. Before being used it is cooled by refrigerating machinery. The firm also generate their own carbonic acid gas for the aeration of their liquors. Flavouring syrups and ingredients are imported by them direct from the leading sources of supply in England

and their constant endeavour is to maintain the highest possible standard of excellence in all their productions. The premises occupy an area of 5,500 square yards, and are the firm's own property. The factory, built specially for its present purpose, has a manufacturing capacity of 4,000 dozen bottles of waters daily.

Messrs Duke and Sons have another factory, occupying an area of about 3,000 square yards, in Parel Road.

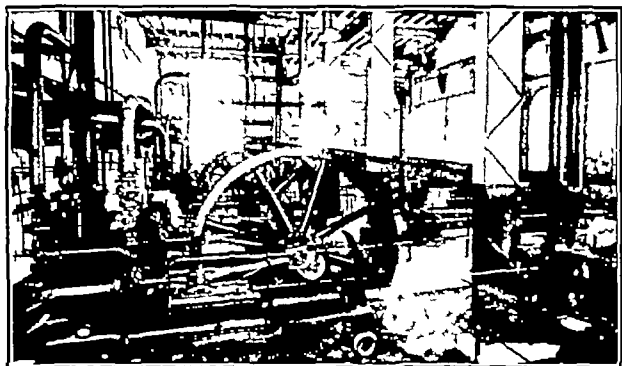
The business was started about 1889 by Mr D. C. Pandole as the result of his visit to England as a member of a cricket team. While in that country Mr Pandole had occasion to inspect the methods employed there in the manufacture of aerated water. Profiting by the knowledge he had gained, he started on his return to Bombay the business in question, and gave it the name of Duke in token of the famous Duke cricket ball with which he had achieved his greatest cricketing triumphs.

After his retirement in 1924 he was succeeded in the business by his sons, Messrs E. D. and P. D. Pandole, who had already been partners in it.

The aerated water factory operated under the same name in British Hotel Lane. Fort used to belong to the firm but was separated from their business in 1897.

BOMBAY CRYSTAL ICE CO , Byculla

NOTHING in the tropics is more delectable and appreciated than ice, that triumph of scientific invention, by which man has been able to improve upon Nature for his requirements, and produce in



POWER ROOM OF BOMBAY CRYSTAL ICE CO.

the sweltering countries of the Equator the product formerly associated only with winter in the temperate zones and the eternal snow of the polar regions. The manufacture of artificial ice was only begun about fifty years ago, and during a temporary deprivation of it it is well to visualise some of the crude conditions that must have existed in the lives of many inhabitants of the tropics whose commissariat was not augmented by regular

additions of meat, fish, fruit, vegetables and other delicacies from overseas preserved by cold storage. When thirst developed there was no delightful product to quench it like that of the Bombay Crystal Ice Co., whose excellently equipped factory has a manufacturing capacity of about fifty tons of ice daily. The ice is made from purified water in blocks of 300 lbs each 61 in thick 12 in wide and 22 in high. It is sold by the company whole sale at the very low price of eight annas per 100 lbs, and for its delivery the company have a fleet of six motor vans and many bullock carts.

The factory, which operates night and day without ceasing, was started in 1922 by its proprietors Messrs Rattonji Pallonji and Behramji Dadabhai. The land, which is two acres in extent, is their property, and comprises various buildings including a cotton waste factory also owned and operated by the firm. The products of the latter are cleaned, prepared, and sent in large quantities to Europe and elsewhere. Kapok and Akand are also exported by the firm.

Mr Rattonji Pallonji is a partner in the firm of P. Dhanjibhoy and Sons, manufacturers of aerated waters, whose factory at Ahmedabad, established thirty years ago, is one of the largest of its kind in India, and is equipped with an excellent plant of modern machinery.

SCHRODER SMIDT-INDIA

General Importers and Commission Agents, Rustom Building, Churchgate Street

ONE of the largest German firms in Bombay before the war was that of Messrs Schroder, Smidt and Co., who had been established there for about seventy years. The old trade connections of that house, that has its records throughout India, are now being continued under the name of Schroder Smidt-India, and branches of the concern are established at Calcutta and Delhi with agencies at Madras, Amritsar, Lahore, and elsewhere.

Messrs Schroder Smidt-India are importers of piece-goods and the infinity of things comprised by the term of Continental sundries. They are also exporters of manganese and other ores. The manager at Bombay is Mr H. Tessmann. The corresponding firm in Europe are Messrs Scholvin and Co., Hamburg.

D MACROPOLO and CO , Cigarette Manufacturers and General Tobacconists, Hornby Road

MESSRS D MACROPOLO AND CO have the distinction of being the premier cigarette manufacturers and general tobacconists in Bombay. They have been established since 1863, and their familiar and commodious premises in the Alice Building, Hornby Road, is a popular source of supply of everything pertaining to the tobacconists' trade, including cigars and tobaccos of world-famous factories, for which the firm are agents.

Messrs D Macropolo and Co's factory is at Bandra, and gives employment to about 150 persons. Particular care is devoted to the sorting and preparation of the many different kinds of tobacco used, which are chiefly imported from Macedonia, and have the pleasing and characteristic qualities of the best Turkish tobacco. The leaves are sorted out by workers specially trained for that purpose, and other experts exercise special ability in the

blending of the various kinds. After the sorting and blending have been accomplished, the tobacco is cut by machinery, and is also finally sifted by machinery before it is made into the firm's many well-known brands of Turkish and Macedonian cigarettes. In the great factories of Europe and America cigarettes are turned out by the million by machinery, but these, as every smoker knows, are not comparable in any way with the hand made cigarettes, of which Messrs D Macropolo and Co's, composed of the finest tobacco, are as choice examples as can be found anywhere. No wonder, therefore, that they have been awarded gold and silver medals at various International Exhibitions and that the firm hold Warrants of Appointment to successive Viceroys and Governors and testimonials from high officials in the Army, Navy and Civil Service.

S BANNISTER and CO , LTD , The Lamp Warehouse, Exporters, Navasari Building, Hornby Road

THE establishment of Messrs S Bannister and Co , Ltd , is rightly termed the Lamp Warehouse, for the variety of lamps displayed therein is exceptionally comprehensive and well calculated to meet the most diverse requirements. The firm are sole agents in India, Burma, and Ceylon for the celebrated Aladdin incandescent arc lamps, which are used in most of the municipalities and cantonments throughout India, where they have been found eminently satisfactory. In the suburbs of Bombay they are much in evidence, for the firm are contractors for their supply to the Bombay Municipality. These popular lamps are much cheaper to operate than gas or electricity, and are unsurpassed by either in lighting effect. Furthermore, the light of the Aladdin lamp is more diffusive, softer, and more agreeable to the sight than electricity, and entirely free from flickering shadows.

Messrs S Bannister and Co , Ltd , also supply table glassware, electroplate, stainless cutlery, glass and china vases, table decoration, pedestals and pots, earthenware, fitted lunch baskets and suit cases, presentation articles, etc.

The firm's main trade, however, is in the exportation of crushed bones to Europe for gelatine and ossein manufacture, etc. They also export oil cakes and other cattle feed, and the shipments abroad of these and their various products amount to several thousands of tons monthly. Of the

commodities in question they are the principal exporters in India. They are the representatives of the Chilean Nitrate Committee in the Bombay Presidency for importation of various forms of sulphates and nitrates for chemical manures and various other products.

Messrs S Bannister and Co , Ltd , are proprietors of the business carried on under the name of the Royal Furnishing and Decorating Co , Ltd , which is the principal undertaking in Bombay for the supply of grandstands, etc , for the visits of royal persons and gala events. Amongst the many large contracts carried through very satisfactorily by that company was the one, amounting to a lakh and a half of rupees, in connection with the recent Five Weeks Exhibition in Bombay, and comprised the construction of the entire Exhibition buildings and its amusement section, under the patronage of H E the Governor.

The business of Messrs S Bannister and Co , Ltd , was established in 1887 under the name of R Ditmar, Lamp Warehouse. In 1914 it was taken over by Mr S Bannister, who had been one of its assistants for two years, and then became known as S Bannister and Co. The firm was formed into a limited liability company in 1919, and the manager since then has been Mr S N Mistry. The telegraphic address is "Bannister," Bombay, and the codes used are the A B C 5th and 6th editions, Bentley's, and private.

J PIROJSHA and CO , General Merchants and Commission Agents, Rahimabai Building, 65, Apollo Street, Fort

MESSRS J PIROJSHA AND CO were established in 1911, and have developed an important and influential business as general merchants and commission agents. Their principal imports are electrical goods and stationery. They are sole agents for Philips' Glowlampworks, Ltd , Holland, in whose works at Eindhoven 11,000 persons are employed in the production of all kinds of electric lamps, from the tiniest torchlight lamp to the most powerful gas-filled lamp ever produced. An example of the enormous extent of the work executed there is afforded by the fact that in the wire-drawing department about 180 miles of wire per day are drawn to a diameter as small as 0.00016 in. The Philips electric lamps illumine the world on land and sea, and the story of the development of the great business is the story of perfect adaptability to every requirement in progressive

illumination. The manufacture of the Philips lamps began in 1890, and each invention and improvement in relative materials was followed by corresponding evolution in the Philips lamps, which now have reached a state of perfection apparently beyond possibility of enhancement.

Messrs J Pirojsha and Co are also sole agents for Aron Elektricitats-Gesellschaft, Germany, manufacturers of the celebrated Aron House Service electric meters and wireless apparatus, and A W Faber, the famous pencil manufacturers of Nuremberg, Germany. The partners are Messrs Jhangir Ashandier Irami, Khurshed Aspandiar Irami and Pirojsha Hirjibhoy Davda. The telegraphic address is "Precious," Bombay, and the codes used are the A B C 5th edition, Bentley's Western Union, and private. They own the business of the Precious Electric Co. referred to below.

PRECIOUS ELECTRIC CO General Electric Merchants 65, Apollo Street, Fort

The business carried on under the name of the Precious Electric Co is a subsidiary of Messrs J Pirojsha and Co , referred to above, and is devoted to the supply of electrical goods of every description. The agencies of Messrs J Pirojsha

and Co apply also to the Precious Electric Co. A recent development of the latter undertaking is a radio department in Hanuman Street. Both companies have the same telegraphic addresses and codes.

WILSON WATCH CO , Hornby Road

THE WILSON WATCH CO is one of the most noteworthy examples in Bombay of successful advertising and substantiating publicity methods by goods of quality at rock-bottom prices. The business was started in 1923 in diminutive premises at Ballard Estate, and through the ability and enterprise brought to bear on all its details, it has developed very successfully in India. The firm specialise in the supply of all kinds of Swiss watches and clocks, and have offices at La Chaux-de-Fonds and Geneva, Switzerland. They have also branches in Abdul Rehman Street, Bombay, Rajahmundry, Madras, and Palghat, Malabar, as well as agencies throughout India. Their policy of selling at the lowest possible profit on each transaction is certainly commendable in view of the increased turnover accruing therefrom in the year's trade. Every watch supplied by the Wilson Watch Co is tested and accurately timed before being offered for sale. However good a watch may be, it must be periodically cleaned, and accidents, of course, necessitate repairs. The excellent service organisation of the company includes a repair department where highly skilled employees are employed.

The founder and proprietor of the business is Mr B A Shaw, who is to be congratulated on the success he has achieved. The telegraphic address is "Timepiece," and the code used is Bentley's

The Eastern Telegraph Company—Bombay Station

From	4/4			316
STATION FROM				
To	Work	Time required for transmission	OFFICIAL CONNECTION—	
	Day	5 56	VIA EASTERN	
To : Person	DYK 26 LACHAUXDEFONDS 30 23 5.55PM			
LCD WILSON WATCH 60 BOMBAY				

BARGAIN SETTLED DISPOSE OF ENTIRE BOMBAY

— STOCK AT 60 O/O REDUCTION SALE AND REMIT

— MONEY IMMEDIATELY FORWARDING FURTHER LOTS

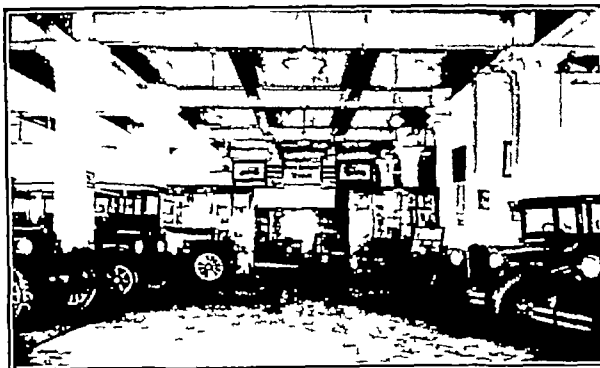
WILSON WATCH CO CHAUX DE FONDS &

From	To	At	By
4/4	4/4	4/4	4/4
<p><small>2. B.—All Telegrams regarding the Telegram should be made to the Government Telegram Office.</small></p> <p><small>3. C.—If any Telegram regarding this Telegram is to be sent to the Government Telegram Office, the Telegram should be sent to the Government Telegram Office.</small></p> <p><small>The Public are advised to send Telegrams to the Government Telegram Office, and not to the Telegram Office, as the Telegram Office is not responsible for the Telegrams sent to it.</small></p>			

Clever advertising by the Wilson Watch Co in the above connection resulted in their selling 120,000 watches in one month.

BOMBAY CYCLE AND MOTOR AGENCY, LTD ,
Managing Agents Rharshedji Limji and Co Head Office 16, New Queen's Road

Not a few of the principal motor undertakings in India were started in the pedal cycle trade. One of the most noteworthy examples in that connection is afforded by the Bombay Cycle and Motor



SECTION OF PREMISES OF BOMBAY CYCLE AND MOTOR AGENCY, LTD

Agency, which was established in 1885. When the motor car made its appearance the firm were quick to realise its potentiality, and in due course became agents for well-known English, Continental, and American makes, trucks and motor cycles, being the first to introduce the single-cylinder De Dion Bouton cars into the Bombay market. In 1914 the Bombay Cycle and Motor Agency became the sole agency for the famous Dodge cars and Graham Brothers' trucks for the

Bombay Presidency, including Karachi, Sind, and Baluchistan, the Nizam's Dominions, and a great portion of the Punjab, Rajputana, Central Provinces, and Persia. In Persia especially the agency's trade is developing very largely and rapidly.

The firm's premises in New Queen's Road are amongst the largest of the kind in Bombay. They give employment to about 200 persons, and are admirably equipped with everything for the perfection of process and result in automobile engineering, body-building, painting and enamelling, electrical work, etc. One of the workshops is devoted entirely to motor cycles and their repair, and in that branch of trade the firm are agents for the Indian and Douglas machines.

At Lahore the Agency has another establishment, excellently equipped with electrically-driven machinery, although not so large as the head quarters at Bombay. There are also other branches at Karachi and Nagpur, and agencies at almost all the important centres of the territory covered by the business.

Since 1924 the Bombay Cycle and Motor Agency has been under the managing agency of Messrs Rharshedji Limji and Co, through whose enterprise and ability it has well sustained the merit and fame of the productions to which it is devoted. The telegraphic address of the Bombay Cycle and Motor Agency is "Cyclosters," Bombay.

THE CENTRAL GARAGE, Proprietors, AIMILA AUTOMOBILE COMPANY, New Queen's Road

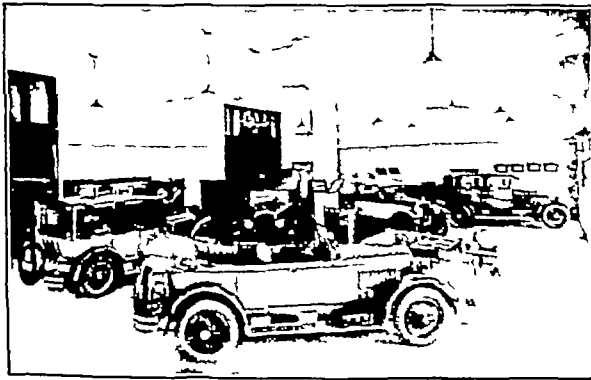
In no city in the Orient is the motor trade better developed than in Bombay, where the garages are equal to the best that can be found anywhere. Amongst them is the Central Garage (owned by

This firm started business in January, 1926, with a very small establishment, and have made excellent progress. Their large and handsome showroom, located in the best automobile centre, is one of the finest of its kind in Bombay. The cars handled by the firm are the Nash, Chandler, Packard, and Singer, which are immensely popular, not only in Bombay, but throughout India.

Mr. Alimohamad Rahimtullah, proprietor of the concern, is a very enterprising young man and an ardent motorist. Mr. S. V. Varde, the general manager, is another young man with keen business instincts and organising capabilities. With such able men directing its affairs it is not surprising that the undertaking is developing rapidly.



PREMISES OF THE AIMILA AUTOMOBILE CO



SHOWROOM



DEPARTMENT FOR USED CARS

the Aimila Automobile Co.), which occupies an area of over 10,000 square feet and gives employment to about 80 persons, who are engaged in everything associated with the motor trade.

The firm have a very large district dealer organisation. Their London agent is Mr. P. E. Palmer, Norfolk House, Laurence Pountney Hill, London, E.C. 4.

LUND and BLOCKLEY, Clock and Watch Manufacturers, Silversmiths and Jewellers, Sassoon Institute Building, Esplanade Road

There are not in the world many business undertakings which have been established for upwards of 200 years. Any with such a record are certainly worthy of meritorious recognition. Amongst the limited but illustrious number is that of Messrs. Lund and Blockley, which was founded in 1725 in London, where the skill of the goldsmiths, silversmiths, watchmakers, and clockmakers was famous everywhere, and the ancient Guilds upheld with jealous pride the splendid traditions of their crafts.

In 1879 Mr. George Lund, a member of the Lund family that had been so well known for many generations in the city of London in connection with the working of precious metals and jewellery, and the manufacture of timekeepers, proceeded to Bombay under a contract with the Government for the erection of the magnificent clock of the Rayabhai Tower of the Elphinstone University. That clock, which is of unique design and intricate workmanship, was constructed in London according to the plan prepared by Mr. Lund and erected

at Bombay under his personal supervision. When the work was completed Mr. Lund was persuaded to extend his business activities to Bombay, and accordingly the firm of Lund and Blockley became established in that city. The quaint and striking Sassoon Institute building, in which they have been established during the last quarter of a century, harmonises well with the firm's long record and their achievements in the trade which they exemplify with the rectitude and ability so eminently characteristic of the old-time London concerns of the same character. In one of the windows is a wonderful clock giving the "times of all nations," which was made by Mr. Lund upwards of sixty years ago. The large projecting clock outside the premises is electrically controlled from a transmitter in the show room. In that show room are displayed as choice and artistic articles of gold, silver, and precious stones as can be seen anywhere. While jewels of every description are obtainable there in great variety, special mention should be made of the fine assortment of timepieces

natural pearls. Bombay is the chief market in the world for pearls, which are brought direct from the Persian pearl fisheries, and are sorted, classed, and graded locally—the finest pearls being exported westward to Europe and America, while the inferior pearls find their way eastwards. Messrs Lund and Blockley are in direct touch with owner experts and directly control their own interests in the pearl fisheries, so that they are able to supply pearls at a price approximately 40 per cent lower than they could be purchased in Europe.

Messrs Lund and Blockley's assortment of watches is exceedingly varied and attractive, while their specialisation in the manufacture of clocks of every description is one of the most outstanding features of the business. Notable examples of their skill in that connection are afforded by the Bombay University clock already mentioned, which was made with chimes of 16 bells, the clocks in the Kolhapur new palace,

Limbdi Durbar Hall, Baroda Chinnabai Memorial Tower, the new G I P Railway terminus, and other public clocks.

The operations in the firm's busy and well equipped workshops comprise everything associated with the trade, and their activities include electroplating, laquering, and bronzing. All their plate is guaranteed treble deposit and up to weight. Each of the workmen specialises at his particular job, and not a few of them have been in the service of the firm for very many years. The firm have the honour of appointment to H E the Rt Hon Sir Leslie Wilson, P C, etc, Governor of Bombay, and are manufacturers to the Government of India.

Mr Lund is now in retirement in England, but during his residence at Bombay was very prominent in everything pertaining to the progress and welfare of the community and greatly esteemed by all classes of the people. The partners resident at Bombay are Messrs F E Roberts and F Power, both of whom have been for upwards of twenty years in the business.

DE LAITTE LIGHTING COMPANY, LTD,

Engineers, Contractors, and Laboratory Furnishers, 5, Graham Road, Ballard Estate

"LIGHT, more light." Such is the ever insistent urge in all human progress, and the measure of that progress has always been determined by the light of knowledge, as well as the material illumination of man's own production. The evolution which has been effected, for instance, in lamps is one of the most interesting chapters in the story of the upward climb of humanity from the darkness of the past. Lamps in all their wonderful modern improvements are supplied by the De Laitte Lighting Company, Ltd, in great variety, from ordinary kerosene and petrol lamps up to others representing practically the highest phases of illumination which have yet been produced apart from electricity. Some of them are equal if not superior to the ordinary electric lamps.

The De Laitte Lighting Company, Ltd, whilst being specialists in the equipment of laboratories with petrol-gas and oil-gas plants, are also

suppliers of an enormous range of other goods, such as

- "Delaitte" petrol gas producers
- "Delaitte" high speed fans
- "Bolinder's" crude oil engines
- "Monitor" stoves and blow lamps
- Domestic electric appliances
- Scientific apparatus and chemicals
- Pocket electric lamps and torches
- High class tools of all kinds for engineers and contractors, etc
- "Delaitte" oil gas apparatus
- "Delaitte" ice machines
- "Evening Star" petrol lampware
- "FK" pill and tablet making machines
- Grinding machinery
- Gas appliances
- Gas mantles and glassware

The business was established in 1907 in Hornby Road, whence it was removed some years later to Apollo Street, and in 1922 to its present location. The telegraphic address is "Delaitte," Bombay, and the codes used are A B C 5th edition, Western Union, Duograph, and Bentley's.

KIAN GWAN and CO (INDIA), LTD, Jehangir Wadia Building, Esplanade Road

The business of Messrs Kian Gwan and Co, India, Ltd, is a subsidiary of the Handel Maatschappij "Kian Gwan," of Semarang, Java, which was established in 1883 by Major O Oei Tiong Ham, who died in June, 1924, at Singapore. That highly-esteemed and wealthy gentleman was very capable in all his affairs. Under his direction the business became one of the largest Chinese undertakings in Java. The company own five sugar factories, which have an annual production of 1,100,000 piculs, and their plantations occupy approximately an area of about 2,000 bouws each. They have also rubber and coffee plantations and mills. They are exporters of sugar, rubber, tea, hides, skins, and copra, and are also very exten-

sive importers of rice, sulphate of ammonia, gunny bags, fertilisers, and general building materials. They have a fleet of steamers, under the name of Heap Eng Moh, running between Java, Singapore, Rangoon, and China. They also own the bank known as the Bankvereeniging Oei Tiong Ham, in Semarang.

Messrs Kian Gwan and Co, India, Ltd, have been established since 1925, and have branches at Calcutta. The manager at Bombay is Mr Oei Kan Tiong Ham, and at Calcutta Mr A Rine. The telegraphic address is "Thyngwanho," and the codes used are the A B C 6th edition, Lieber's, and Bentley's.

KING and CO . Booksellers, Newsagents, Stationers, etc , 215, Badri Mahal, Hornby Road

Messrs KING and Co specialise so much in the supply of newspapers that there is no firm in India surpassing them in quickness of delivery or universality of publication. Everything that can be utilised for the expedition of their activities in that connection is taken advantage of by the firm, who are prepared to deliver regularly copies of any paper, magazine or periodical, from any part of the world, to order.

The rapidity with which they receive their supplies of newspapers is a characteristic also of their book business. They are in receipt of the latest and most popular volumes as soon as they can be brought from England by the mail steamers direct after publication. Very interesting is their assortment of literature. It is so comprehensive

that it meets every taste and requirement from the most sensational novels to the profoundest works of philosophy and science. The knowledge embraced by the stock of books in Messrs King and Co's premises is the knowledge of the ages. They also supply picture postcards, stationery, office requisites, fine art pictures, photo frames, etc. in abundant variety.

The business was started in 1895 by the sole proprietor Mr D S King, in connection with pictures and picture framing. House furnishing and decoration were also added, but eventually these departments were discarded when Mr King turned his attention to the bookselling and stationery trade.

SINCERA WATCH COMPANY,**Watch Manufacturers and Jewellers, Proprietors D R PUNDOLÉ and SONS Hornby Road**

EVERY decade sees many changes in customs and fashions and these effect corresponding changes in commerce and industry. The establishments of watchmakers and jewellers for instance in Bombay and elsewhere in India are not stocked as they used to be. In former years jewellery was much worn by ladies and gentlemen but in these greatly altered times when masculine tastes have changed in regard to personal adornment and feminine apparel and hirsute ornamentation have been reduced to the utmost limit everything is made subservient to utility, so that the indispensable watch is now called upon for accuracy and fidelity of service as never before in the history of its production. Therefore it is that the Sincera Watch Co while of course stocking jewellery in considerable variety specialise in the supply of time-keepers of every description. An inspection of the extraordinary wide range of their watches

provides an object lesson in the wonderful perfection with which watches are now made as well as their exquisite designs, from tiny wrist watches studded with diamonds, which only the wealthy can purchase down to the plainest watches for the individual who has to scrutinise carefully every rupee before spending it and to whom, moreover time-keeping reliability in a watch is a matter of very great importance. The company are importers from Switzerland, England and Germany and have an office at Chaux De Fonds, Switzerland.

The Sincera Watch Co was taken over in 1913 by Messrs Pundole and Sons who have been established in 1886, and whose founder, Mr R Pundole died in 1925. The present proprietor is his son Mr N D Pundole. The telegraphic address is "Pickett" Bombay.

PHIROZE M DASTOOR and CO , Oculists and Manufacturing Opticians 379, Hornby Road

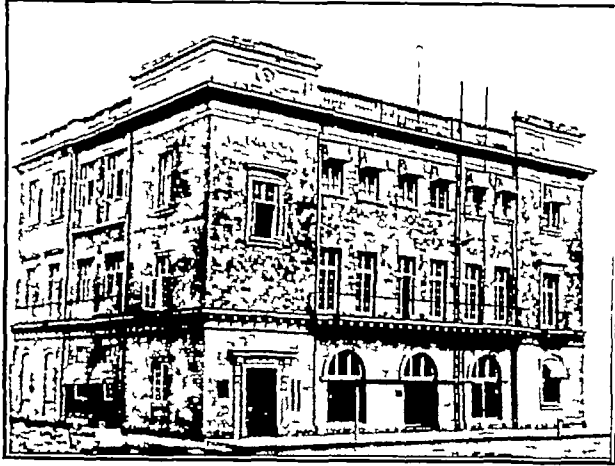
SIGHT is the most remarkable of all our senses, because of the special nature of the impression it receives the complicated nature of its apparatus, and the variety and value of the information it affords regarding external objects. Unfortunately, however the troubles to which the eyes are subjected are many and insidious, and it is an undoubted fact that many people have defective sight who are totally unconscious of it. This unconsciousness often leads to serious results, hence the value of a consultation with a specialist, which may be the means of preventing great misery and loss. But there are individuals who are aware of their visual defect and through ignorance or indifference make no effort to remedy it until irreparable mischief is done and their repentance is accentuated by grievous reflection of the "might have been". There is no excuse for such neglect in Bombay in view of the service and supplies provided so efficiently by Messrs Phiroze M. Dastoor and Co. Sight testing, for instance is carried out by them with great care by experts

aided by modern contrivances for the detection and remedying of every phase of imperfect vision. Their premises and workshop are excellently equipped with everything pertaining to the trade and there is no prescription however uncommon or difficult which Messrs Phiroze M Dastoor and Co are not able to fulfil with the utmost expedition and skill. Their large staff includes qualified oculists who were trained in London hospitals and the firm have the honour of special appointment to successive Governors of Bombay including H E the Rt. Hon Sir Leslie Wilson H H the Maharaja Gaekwad of Baroda, and H H the Maharaja Scindhia Bahadur of Gwalior.

The firm transact a large wholesale as well as retail trade in optical goods of every description. Their business was established in 1898 by Mr Phiroze M Dastoor and since his death in 1923 it has been carried on by his adopted son Mr Khorshed Dastoor, who is one of the ablest and most experienced oculists in India.

PATHE-INDIA, Pathe Building, Ballard Estate

THE influence and potentiality of the cinematograph are beyond computation. Although only about twenty-five years have elapsed since the first moving picture was shown, the cinema industry has undergone truly amazing development, and enters more intimately into the lives of the



PATHE BUILDING, BALLARD ESTATE.

people than any other recreation. As an educator and disseminator of knowledge, an amusement that easily takes first place in the world's popularity, and of enormous and universal power for good or evil, the cinematograph is one of the most wonderful and momentous of all inventions.

The first workable cinema machine was made by an Englishman, and its sale to Mr Charles Pathé was the practical foundation of the illustrious

firm of Pathé-Frères, whose films are so universally prominent and popular. Messrs Pathé Frères, whose head offices and factories are at Paris, have branches in all parts of the world.

In 1907 they opened an establishment at Calcutta, but the cinema had not then obtained favour in India as it had elsewhere, and it was not until 1910 that a real start could be made in the industry in the peninsula. A small office was then opened at Bombay, and since that time the development of the Pathé interests throughout the Indian Empire has kept in line with the remarkable expansion of the cinema industry and the important part it now plays in the lives of the people. The original small Pathé office in Bombay has been replaced by the commodious Pathé Building, Ballard Estate, built in 1918, and there are now branches of the business at Madras, Delhi, Lahore, Rangoon, and Calcutta. The founder of Pathé India and the sole concessionaire for the Pathé films in India, Burma, and Ceylon is Mr Alexander Hague, who has been connected with the Pathé interests there since 1917. He is also distributor for the First National Picture Co., who control all the large theatres in the United States and have offices throughout the world. The Pathé building in Bombay has vaults specially constructed for the storage of films, and is the only establishment of the kind in India. Amongst its comprehensive stock is a very large assortment of the celebrated Pathé "Baby" films and equipment.

The telegraphic address of Messrs Pathé India and the First National Picture Co. is "Pathé," Bombay. The code used is Bentley's.

SCHMIDT, SCHIFFER and CO, Manufacturers' Representatives, York Building, Hornby Road

GERMAN commercial enterprise in Bombay and Calcutta has a noteworthy example in the business of Messrs Schmidt, Schiffer and Co., which was started in 1927, and is a branch of Messrs Hecht, Pfeiffer and Co., the well-known Berlin firm who have been established for about seventy years and whose trade extends throughout the world.

Messrs Schmidt, Schiffer and Co. are sole agents in India for sixty-four of the leading manufacturers in Germany, so that they have an exceptionally large range of supplies in machinery, beer, mechanical toys, piece-goods, paper, chemicals,

sundries, and, indeed, goods of every description. The partners in Messrs Schmidt, Schiffer and Co. are Mr C. E. Schmidt, who is in charge of the Calcutta office, and Dr G. Schiffer, who looks after the firm's interests at Bombay. They have also an office at Madras, and their agents in India are as follows: Nusserwanjee and Co., Karachi, M. A. Rahman, Amritsar, Bombay-Delhi Trading Co., Delhi.

Messrs Schmidt, Schiffer and Co.'s telegraphic address is "Hechtusa," and the codes used by them are Bentley's, Rudolph Mosse, and private.

**MERWANJEE POONJIAJEE and SONS,
Manufacturers of East Indian Condiments, 96, Frere Road**

EUROPEANS who reside in India for any length of time generally acquire a liking for the condiments made there, and when they leave for Europe or elsewhere they are able to continue their culinary tastes because of the fact that the well-known productions of Messrs Merwanjee Poonjiajee and Sons are procurable throughout the world.

The business of that firm is the oldest and largest of its kind in Western India, and has been

carried on since its inception in 1876 in its present premises at 96, Frere Road. In that busy place well-trained workers are employed in the manufacture of all kinds of preserves, such as chutney, curry powder, jams, jellies. The high quality of the output is eloquently indicated by the gold and other medals, etc., awarded to the firm at various Exhibitions in Europe and America.

BHÂRAT FLOORING TILES COMPANY,
Manufacturers, Morarbhai Building, 47, Apollo Street

THE business of the Bhârat Flooring Tiles Co is the only one of its kind in Bombay, and the progress it has made since it was started in 1922 is a noteworthy example of Indian enterprise and ability in the production of goods that are more than holding their own against foreign competition. The firm's factory at Uran, across the harbour of Bombay, gives employment to about 150 persons. The tiles made there are practically unlimited in pattern, for while the company possess a large number of different standard designs of beautiful chromatic effects, they are not restricted thereto, but are ready to manufacture to order any special or uncommon patterns that may be desired. A feature of these tiles—and also of the skirtings, dados, etc—is that the colours reach such a depth that the tiles are practically everlasting, whilst the colours improve very considerably as time goes on. They are also easy to lay if the instructions of the manufacturers are followed, whilst the cost is considerably less than that of the imported article.

The floor and surround of the various rooms of the Breach Candy Baths is composed of Bhârat tiles, and the actual surround of the pool is formed of a special non-slipping checkered tile. Amongst the many other buildings in which the Bhârat floor tiles have been laid are the Maharaja of Baroda's Jai Mahal Palace on Hornby Vellard, Mrs Flora Sassoon's bungalow on Ridge Road, Jehangir Building, and the National Bank extension on Esplanade Road, Petit Building on Hornby Road, the Baroda Bank, the operating theatre of the new G I P Railway Hospital at Byculla,

Mahomedbhoy Datoobhoy's bungalow on Pedder Road, two new buildings on Queen's Road, opposite Marine Lines Station, whilst on the outskirts of Bombay Bhârat tiles have been fitted at St Andrew's School in Bandra, the Ismailia College at Andheri, the new power house at Dharavi, the



MORARBHAI BUILDING,

containing the offices of the Bharat Flooring Tiles Co is an interesting relic of the 18th Century for it was the residence of the Governor of Bombay from 1757 to 1829. Governor Jonathan Duncan died there in 1811. The building was used as the Secretariat from 1829 until 1873.

Bombay Yacht Club, and the Municipal Commissioner's bungalow.

The company have another factory at Karachi under the name of Nusserwanjee and Co. The telegraphic address at Bombay is "Entente," and the codes used are Bentley's and the A B C 5th edition.

MADORINA WATCH COMPANY, LTD , Standard Building, 336, Hornby Road

It is an interesting fact that fully 80 per cent of the watches of the world are of Swiss manufacture. The leading watch firms in Bombay are of that nationality, including the Madorina Watch Co, Ltd, whose supplies present as great a variety of timekeepers as can be found in India. That company are not limited to high-class watches, but deal in every kind, from the cheapest examples to the finest that can be desired. They specialise in watches, and their trade extends

throughout the Peninsula. In their establishment at 336, Hornby Road repairs to timekeepers of every kind are skilfully executed by a staff of experts.

The business was established in 1912 by Mr H Madorina, and succeeded so well that in 1916 it was formed into that of a limited liability company with Mr Madorina as managing director. Its cable address is "Madorina," Bombay.

BENNETT and CO , Auctioneers, etc , 120, Apollo Street

THE business of Messrs Bennett and Co was established in 1837, the year of the death of William the Fourth and the accession of Queen Victoria to the throne. The firm's premises, with their original stone floor, used to be legal chambers, and the building dates back for hundreds of years, so that in the offices of Messrs Bennett and Co there are many impressions of the past when Bombay was utterly different from what it is to-day. Throughout the intervening decades the firm have conducted sales of property of every description just as they still do. The goods that pass through their hands represent the entire

range of human requirements—houses, land, furniture, piece-goods, merchandise relating to dishonoured bills, bankruptcies, motors, horses, carriages, etc. The firm's long experience of their avocation in Bombay naturally has given them a thorough understanding of local values and potentialities.

The present proprietor of the business is Mr Framjee Cowasjee Bennett, who has spent his entire career in it, a matter of fifty-two years, and is a grandson of the founder, Mr Pestonjee Suklajee Bennett.

PARISIAN DAIRY COMPANY, 1, Tamarind Lane, Fort

In no country in the world is there greater necessity for the exercise of care in connection with milk than India. In view of the continual dangers of contamination that ever threaten in the climate and conditions obtaining in Bombay, for instance,



PREMISES OF PARISIAN DAIRY CO

the business of the Parisian Dairy Co is worthy of all praise because of the methods by which it is conducted and the contrast these provide to the really dreadful manner in which milk is carried,

exposed in brass receptacles, through the streets by Indian milkmen catering to the masses. It was started in 1911, and the excellence of its service and supplies has developed it considerably. The company have now between 300 and 400 head of cattle at their dairy farm at Byculla, where the animals are kept in clean and healthy surroundings. Very great care is taken in the milking and bottling operations. The total output of milk is about 60 maunds, or 600 gallons, and is despatched in glass bottles with new patent seals that cannot be tampered with fraudulently, and are a great improvement upon all previous precautions taken in the same connection. The company's clientele is very large, and extends from Colaba to Bandra. They supply many of the principal hotels, clubs, and homes, etc., in Bombay.

At an exhibition of foods and household requisites of Indian production held in the Town Hall, Bombay, in 1917, the company were awarded a diploma of merit for their general display of dairy products. They have the honour of appointment as caterers to H R H the Prince of Wales and the Duke of Connaught. The proprietors are two brothers, Messrs Pirozesha and Shavaksha Mistry. One of the founders was their brother, Mr Manekjee Sorabjee, who died in 1922.

PEARSE and CO, Confectioners and Caterers, Apollo Street

MESSRS PEARSE AND Co have every reason to be proud of the fame which they have attained as bakers, confectioners, and caterers, and the important rôle which their business plays in the daily routine of life in Bombay. It was established in 1872, and during the intervening decades has contributed much to local necessities and pleasure. Messrs Pearse and Co are the leading bakers in the city, and are Army and Navy contractors. They employ about 100 persons. Their bakery is equipped with an excellent plant of machinery, and it is the only one in the city with patent smokeless ovens. Its daily output of bread is 250 maunds (7,000 lbs), which is supplied to hospitals and other institutions and a large number of private residences. All kinds of delicious biscuits, cakes, and confectionery are also made by them. Wedding cakes of all sizes and styles are a

speciality for which Messrs Pearse and Co have long been celebrated. They have the honour of having been appointed confectioners to successive Governors of Bombay, and they have been awarded at various Exhibitions gold medals for the high quality of their productions.

The firm's well-known establishment in Apollo Street is a popular rendezvous for first-rate meals and refreshments. Mention must not be omitted of their famous tea and coffee, which are put up by them in one pound and half-pound packages, and command a large sale.

The resources of the firm as caterers are equal to all requirements, and they hold themselves in readiness at all times to undertake the largest contracts in that connection.

The proprietor of the business is Mr Bipuji Dorabji Daruvala, who took it over in 1927.

ERUCH D ENGINEER and CO.,

Machinery, Mill, and Gin Stores Importers and Suppliers, 95, Apollo Street

MESSRS ERUCH D ENGINEER AND Co have been established since 1907, and are well-known throughout India, for they have a staff of travellers constantly "on the road" in that country. The firm are specialists in the importation and supply of machinery, machine tools, mill and gin stores, beltings, etc., and are noted for the low cost at which they sell these. The reason of that achievement is because one of the partners, Mr D D Engineer, visits Europe every six months, and makes a thorough tour of investigation at the best sources of supply of the goods in

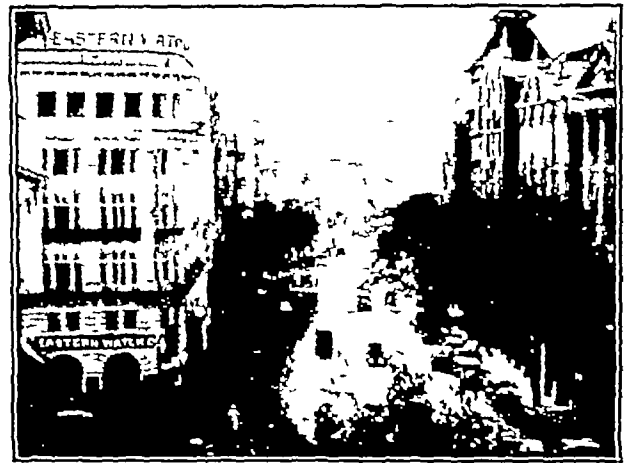
which they deal. They purchase direct from the manufacturers and save middlemen's profits. By the system they adopt they are also enabled to keep in touch with the latest inventions and improvements associated with their lines of supply, so that their customers have all the advantages accruing therefrom. It is not surprising, therefore, that the firm transact a flourishing and increasing trade. Their telegraphic address is "Oilengines," Bombay, and the codes used by them are Bentley's and the A B C 5th and 6th editions.

EASTERN WATCH COMPANY, 231, Hornby Road

NEVER has accuracy in time been more important than in these strenuous days in which scientific appliances operate in all departments of activity with a precision altogether beyond the range of regarded possibility in former generations. The modern time-keeper is utilised for purposes that never entered into the imagination of people a few decades ago, and the style of watches has vastly changed also from what they used to be. The assortment of them kept by the Eastern Watch Co., for instance, is an interesting and instructive object lesson in the great variety of designs now in popular favour. These are all the more noteworthy because of the fact that they represent the best French, German, and, of course, Swiss makers, so that the individual who is desirous of obtaining a reliable time-keeper at moderate cost, as well as persons who want something out of the common in wrist or pocket watches and of superior quality, will find the assortment of the Eastern Watch Co. well calculated to meet the most fastidious requirements.

Every good watch requires periodical cleaning and overhauling. Many a valuable watch has been ruined by being entrusted for that purpose and for repairs to unreliable firms employing inexperienced workmen. The Eastern Watch Co. have a large staff of experts, under European

supervision, and the utmost reliance may be placed in the perfection of their work, which embraces everything pertaining to watches and clocks. The



HORNBY ROAD, SHOWING PREMISES OF EASTERN WATCH CO

business was established in 1925, and the firm have a branch at Geneva. The telegraphic address is "Vogela," Bombay, and the code used is the A B C 5th edition.

SYKES and PATKER, Architects, Civil Engineers, and Surveyors, 106, Meadows Street, Fort

THERE is no business which demonstrates more strikingly the fact that thoughts are things than one like that of Messrs Sykes and Patker. Every building, for instance, must be created in all its details on the mental plane before it can take shape materially. As architects, Messrs Sykes and Patker have done much excellent work in Bombay and elsewhere, including the designing of office

buildings and residences in Bombay, bungalows, temples, mosques, sanatoria, factories and mills, both in Bombay and the Presidency.

The present members of the firm are Mr H J Sykes, B A, L C C, M R San I (London), Mr M S Patker, B A, L C E, and Mr P M Patker, A R I B A (London), A M I Srucl E (England).

DINSHAW M DASTOOR and CO,

Oculists and Manufacturing Opticians, 71, Esplanade Road and Meadows Street

THE wonderful progress made by opticians in recent years in the rectification of visual errors is certainly amongst the most beneficial achievements of science. Those whose eyes are perfect cannot readily realise the horrors of blindness, and so take the inestimable blessing of good sight as a matter of course. But the eyes are the most delicate organs we possess, and a very slight injury or a very slight illness may lead, if neglected, to the most terrible consequences. A surprising number of people wear glasses, but many of them not the right glasses. Wrong glasses are worse than none at all. They are a constant strain and a source of permanent injury to the eyes. Only scientific examination can determine what glasses are required, and in this laudable sphere of activity Messrs Dinshaw M Dastoor and Co. operate, bringing all that optical science has produced for the prevention and correction of imperfect vision within the reach of

the people of Bombay at moderate prices. There is no peculiarity of impaired vision which they cannot alleviate, and the lenses they supply to suit each individual case are as varied as requirements can make them. Sight-testing is an important feature of their work, and they have everything necessary for its perfection.

In their workshops behind the front establishment about fifteen persons are employed. No business of the kind in India is more ably controlled. It was established in 1887 by Dr D M Dastoor, and in course of time passed into the possession of his brother, Mr R M Dastoor, father of the present proprietors, Dr H R Dastoor, L M & S, and Mr N R Dastoor, F S M C, F I O, F N A O (London).

The latter has the honour of being a Freeman of the City of London through his professional qualifications. Under such expert direction it is not surprising that the firm are unsurpassed anywhere for their service and supplies.

REMBRANDT STUDIO, 251, Hornby Road, opposite Lloyds Bank

VANDYKE STUDIO, 130, Esplanade Road, opposite Clock Tower

NAMES of business places are not always fitly chosen. Many bear no relation nor suitability whatever to the nature of the concerns they are meant to distinguish, but some are excellently in harmony with the work done and the aspirations behind it. Thus, for instance, no designations could be chosen for photographic studios more eloquently suggestive of superlative merit in portraiture than those of two of Bombay's most popular undertakings of that character, viz., the Rembrandt Studio and the Vandyke Studio, at the addresses indicated above. Rembrandt, who died in 1669, was one of the greatest of the Dutch school of painters. Vandyke, who was born at Antwerp, studied under Rubens in Italy, became another of the most celebrated masters of portraiture, and was knighted and pensioned by Charles I of England. When these great artists lived photography, of course, was unknown, and

did not come into existence until towards the end of the first half of the 19th century, but the same ideals and aspirations that gave to the famous painters of old the divine discontent with mediocrity and the imperious urge towards the perfection in which it has its greatest measure of expression, may truly be said to be in operation in the studios mentioned. Unfortunately, art in these strenuous days is demarcated by financial considerations, and the productions of photography, like those of every other department of artistic endeavour, must be regulated accordingly, nevertheless, for a very moderate expenditure there may be obtained in the Rembrandt and Vandyke studios portraits of every description, from exquisite miniatures to beautiful life size and life-like paintings in oils framed in any material to suit the most varied tastes.

VISRAM BROS, Importers and Exporters, 12, Rampart Row, Fort

THE development which has been attained in the manufacture and use of artificial silk is truly remarkable. Although the material is not to be compared with natural silk for wearing quality, it is, of course, much cheaper and, therefore, very popular in India, where it is specially adapted for the garments of the people. Messrs Visram Bros are importers of artificial silk yarn, also piece-goods, dyes, and chemicals, coal, coke, and pig-iron, mill stores and engineering requisites. They are owners and operators of the business carried on under the name of Vinzy, Wolf and Co., of the same address, and are agents for Fred S. Walmsley and Co., Accrington, belting, and Kunsterde Vertriebs Gesellschaft, Steckbon, Switzerland.

The business was established in 1909 by the present partners, Messrs A. H. and M. H. Visram, brothers, whose family were founders and proprietors of the large and influential concern formerly carried on under the name of Visram,

Ebrahim and Co., general merchants, and now known as Visram Bros. That firm were the pioneers of the rice trade between Rangoon, Calcutta, and Bombay, and eventually their operations in it exceeded that of any other house. They owned a steamship line and mills at Calcutta and Bombay. Mr. Fazulbhoy Visram, C.I.E., uncle of the brothers Visram already mentioned, was very prominent and influential in Bombay, he was a member of the Legislative Council, acted for Government at Paris, was President of the Bombay Corporation, Chairman of the Standing Committee, Chairman of the Bombay Telephone Co. and the Oriental Government Security Life Assurance Co., a member of the Bombay Port Trust, etc. The telegraphic address of Messrs Visram Bros is "Vizy," and the codes used by them are Scott's 10th edition, A.B.C. 5th edition, Bentley's, and private.

THE INTERNATIONAL SHIPPING AGENCY, Narandas Building, Sprott Road, Ballard Estate

As life indicates motion and motion life, so therefore the transit of merchandise in greater or less bulk is an accurate indication of the life of commerce, and without the variation of demand and supply connoted thereby enterprise would languish and initiative pass away. In the handling of goods of every description and in all the activities of shipping, clearing, passage, insurance, and freight agents The International Shipping Agency operate with commendable ability. Not only are they ready at all times to undertake anything in which thorough acquaintance with local conditions is a prime essential, but to carry through with tact and discretion any proposition that can come within the range of their activities. Their experience of Port regulations is duly taken advantage of, and is invaluable to those who are unable to devote the time and attention necessary for the reception, warehousing, and despatch of cargoes of every description.

The concern represents firms throughout the world, and was founded in 1916 by its sole proprietor, Mr. Robert Charles Aranha, whose experience of local business includes ten years of banking. He it was who floated the Union Bank of India in 1920. Mr. Aranha is a Fellow of the Royal Economic Society of London and the London Association of Accountants, also an Associate of the Institute of Bankers of London. His telegraphic and cable address is "Mildred," Bombay, and the codes used by him are the A.B.C. 5th and 6th editions.

EMPRESS IRON and BRASS WORKS, Connaught Road, Byculla

THE only Indian firm of manufacturing engineers in Bombay who actually make parts of machinery is that of the Empress Iron and Brass Works, which was founded in the latter part of the 19th century by the late Mr Buijorji Pestonji Reporter. He commenced his business in a comparatively small way, but the excellence of his workmanship soon led to its development, and in five years he was compelled to remove into larger premises in Connaught Road, Byculla. These have since been considerably enlarged and improved, and now cover over an area of 6,000 square yards, almost opposite to the famous Victoria Gardens, and within a few minutes' walk of the Byculla railway station.

Mr Reporter died in 1906, and was succeeded by his six sons, each of whom makes a speciality of the management of one branch of the works, and controls it personally, thereby giving particular attention to the various details as they come under his notice.

The establishment comprises shops for engineers, mechanics, fitters, blacksmiths, pattern-makers, together with iron and brass foundries, offices, and a number of sheds and stores. The engineering shops are fully equipped with all necessary modern machinery, which is driven by a 75-h p electric motor, while a second motor and oil engine have been installed for use in case of emergency.

The firm specialise in repairing work and in the manufacture of entire machines and of all spare

parts. They undertake to turn out machinery requisites for cotton mills, ginning and pressing factories and motor cars, and a large amount of work is carried out in modern engineering, chiefly in repairs to steamers and launches. Castings either of brass or iron, and of all sizes up to five tons in weight, can be made in the foundry. The firm specialise in structural work, and have in a very creditable manner erected several handsome structures in Bombay. They have arrangements with the owners of most of the cotton mills in Bombay and the Mofussil for carrying out repairs to machinery and for furnishing spare parts whenever required, while as contractors they supply building and other materials to various railway companies, and indirectly to the Public Works Department.

There is a branch of the business at Abdul Rehman Street, Pydhonie, a thickly populated business centre of the city.

All employees obtained locally are trained in the works. Some of the men have been with the firm for twenty to thirty years. The majority of those in the mechanics' shops are Parsis, with whom specially favourable arrangements as to apprenticeship are made and to whom various encouragements are given. The total number of persons now employed in the business is about 200.

Gold and silver medals for mill-gear castings were awarded to the Empress Iron and Brass Works at the Bombay and Gujarat Industrial Exhibitions.

RUSSELL STUDIOS, Churchgate Street, Fort

It is not generally realised that a photographic portrait, unlike an oil-painting or a reproduction by means of printers' ink, is an actual emanation of the person represented, a real condensation and impression of the individual life force that may endure long after the physical personality has ceased to exist. That fact imparts a much greater importance and interest to the personal photograph than enters into the consciousness of the uninformed or unreflective. Great indeed are the improvements which have been effected in photographic science during recent years, and they are well manifested in the Russell Studios, where highly qualified experts produce work that would be a great surprise indeed to the photographers of

a few decades ago. The artistic and up-to-date methods by which portraiture is exemplified there are the result of the knowledge and experience that have accumulated since the introduction of the crude preliminary process of photography in 1839.

The Russell Studios were established in 1925 by Mr W G Payne, whose long practical experience in photography well qualified him for the undertaking. All the work in the studios is under his personal supervision, and the charming examples of the firm's capabilities in their show-rooms include portraits of every description from miniatures up to life-size oil paintings.

THE JAPANESE MUSEUM, York Building, Hornby Road

BOMBAY is full of attractive shops, but the interesting one entitled The Japanese Museum, in York Building, Hornby Road, is without duplicate in the city, and is well worth a visit by everyone desirous of viewing or obtaining any of the quaint and artistic curios and art goods of Japan. This uncommon shop is rightly named, and in its greatly assorted stock the visitor is sure to find something that will specially appeal for ornamentation or utility. Silk, for instance, Japan's richest export, small in bulk but heavy in value, is

there seen in all the colours of the rainbow, so also is the beautiful satsuma and other porcelain productions of the "Land of the Rising Sun," together with all manner of alluring and serviceable articles for purposes innumerable. The business was established in 1906 by Mr M J Jamsetji at Poona, and succeeded so well that in 1916 the Bombay establishment was opened and became the headquarters. The telegraphic address is "Museum."

DUKE and SONS, Aerated Water Manufacturers, British Hotel Lane, Apollo Street

MESSRS DUKE AND SONS are quenchers of much of the thirst in Bombay. There are more than 8,000 restaurants in that city, and a large proportion of these are supplied by Messrs Duke and Sons, whose factory in British Hotel Lane, Apollo Street, was established in 1888, and is equipped with an up-to-date plant of machinery, including a plant for the manufacture of the carbonic acid gas used for the aeration of the waters. This is an important and noteworthy feature, as it not infrequently happens that the cylinder gas used in other factories is often old. The firm's productions comprise all the usual variety of non-

alcoholic beverages, and the syrups and flavouring essences used in their manufacture are imported direct from the leading sources of supply in England. Every care is exercised by the firm in the cleanliness of their operations. The bottles are subjected to scrupulous sterilizing inside and out, and the attention paid by the firm in maintaining the high quality of their waters is indicated by their "Purity" trade mark, which is very popular throughout Bombay.

Many changes have occurred in the personnel of the concern. The present proprietors are three brothers, Messrs C J R J, and B J Pantaki.

**C M GOBHAI and CO.,
Manufacturers' Representatives, Jehangir Wadia Building, 49, Esplanade Road**

THE business of Messrs C M Gobhai and Co was established in 1926 under its present name by Mr C M Gobhai, who was formerly a partner in the firm of Messrs M Framrose and Co. When that firm was dissolved its agencies were transferred to Mr Gobhai, and included the following:

Lever Bros, Ltd, London
Benjamin Brooke & Co, Ltd, London

Lever Bros, Ltd, Export Dept, Liverpool, as
Export Agents for
Vinolia Co, Ltd, London
Blonderu et Cie, Ltd, London
Hodgson & Simpson, Ltd, Liverpool
R S Hudson, Ltd, Liverpool
Angus Watson & Co, Ltd, Newcastle-on Tyne
Planters' Products, Ltd, Watford

Johnsen & Jorgensen, Ltd, London

Messrs C M Gobhai and Co also act as distributors in Bombay for Bears' cigarettes and tobacco. In their premises in the Jehangir Wadia Building are effectively displayed samples of the various commodities in which they operate—provisions, hardware, metals, etc. Mr C M Gobhai has had long and extensive experience of commerce in Bombay, where he is well known and esteemed. He employs a staff of travellers who place before the merchants throughout Bombay Presidency and neighbouring territory the many advantages accruing through their direct contact with the manufacturers, and are thus enabled to keep in touch with the latest developments and improvements in each class of goods. The firm's telegraphic address is "Cogobhai," and the codes used by them are the A B C 5th edition and Bentley's.

RANE, LTD, Proprietors of EMPIRE AUTOMOBILES, Queen's Road and New Queen's Road

No business in Bombay illustrates the enormous multiplicity of things associated with the motor trade more than that of Messrs Rane, Ltd, proprietors of Empire Automobiles, whose well-known establishments in Queen's Road and New Queen's Road are carried on with specialisation in service and supplies that imparts to them individual distinction amongst their local contemporaries. The firm's catalogue is a revelation of the infinity of things which have been produced for the enhancement of the pleasure and safety of motoring. Year by year, indeed month by month, new and better methods and contrivances are being

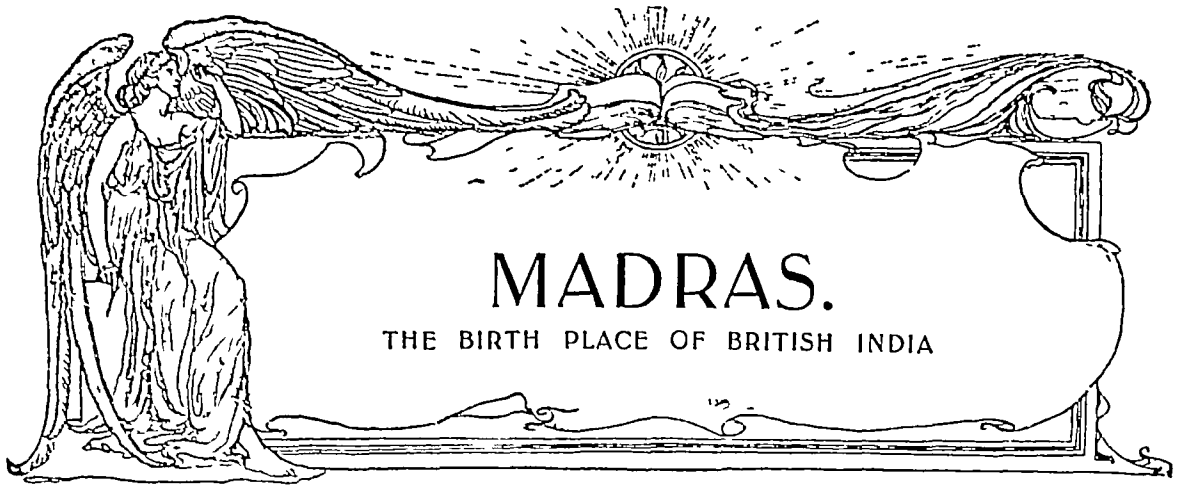
invented in that connection, and Messrs Rane, Ltd, receive these as quickly as they can be obtained, so that their stocks are always a reflection of the latest goods and, therefore, are very popular amongst the motorists of Bombay. Included among the firm's many agencies are the celebrated Westinghouse batteries.

The business was started in 1915 in a small way, and has undergone very successful development. In 1919 the firm was formed into a limited liability company. The managing directors are Messrs T R G Iyer and C G Iyengar. The telegraphic address is "Autoworks," Bombay.

CLIFTON and CO, Photographers, Albert Building, Hornby Road

A few decades ago the art of photography was crude and undeveloped in comparison with the range and perfection it has since attained, and to many people in India it was a new and marvellous accomplishment that won their immediate admiration. Even when the business of Messrs Clifton and Co was established in 1902 the ways and means of photographic science were practically in their primary stage, but since that time many remarkable inventions and improvements in cameras, chemicals, and printing

materials have revolutionised photography. Messrs Clifton and Co are very able exponents of it in all its branches, as is demonstrated by the artistic examples of their work in their studios in the Albert Building, Hornby Road. These examples include exquisite specimens of enlargements and oil paintings of all sizes. The firm has the honour of appointment to H E the Rt Hon Sir Leslie Wilson, Governor of Bombay. The manager of the business is Mr B L Hider.



First Impressions



AS a faint, dark streak appeared on the horizon, there was an immediate rush of passengers to the side of the stately B I vessel. Within a few minutes the indefinable blur of land sharpened as the boat steadily approached the harbour. A waving fringe of palm-trees, extending as far as the eye could see southwards, a thin white line where the breakers dashed sullenly against the sand and a background of quaintly towered and essentially Eastern build-

ings gradually emerged from the softening effect of distance, standing sharply defined against a wonderful sky, brilliant with every colour in Nature's inexhaustible palette, as the sun dropped swiftly westwards. In that short space of time which is so surprising to the newcomer to the East, the golden glow of sunset was replaced by the dusk of approaching night, myriads of twinkling lights sprang into being as if by magic, the lighthouse tower flashed out its friendly warning, and, as the liner passed gently into the harbour, the mantle of night had descended.

Thus may the visitor from the sea be introduced to Madras. His first impression cannot but be favourable, for the palm-fringed coast, with its stately buildings, presents a wonderful picture, but this good impression invariably vanishes on closer acquaintance, and casual visitors are apt to leave with a positive dislike of Madras. To those who know and love the old city, however, it is unequalled in India or, indeed, in the East.

As a matter of fact, very few people realise what an interesting history Madras possesses. It is no modern business city of mushroom growth, but a hoary edifice built upon the foundation of British valour and enterprise. If the stones of the older part of the city could speak, what wonderful stories could they tell — stories

of business enterprise in every possible difficulty and danger, of political intrigue, of treason and treachery, of famine, war, and death.

History

More than three hundred years ago the East India Company, conscious of the growing power of the Dutch, and alarmed for the safety of their two recently established factories at Armagauam and Masulipatam, on the east coast of India, decided to seek fresh fields and pastures new. To Francis Day, a comparatively insignificant employee, was given the task of finding a convenient and safe site for the Company's factory. Francis Day may have been born in obscurity and of no particular importance during his life, but his name will always find a place in national biographies, for he founded Madras, the third city of India.

The task of finding a site which would fulfil the requirements of the Company, and, at the same time, lend itself to adequate safeguarding from the hands of the jealous French and Dutch, as well as from hostile native interests, was no easy one, and it was only after a great deal of exploration that Day fixed upon a site adjoining the then thriving Portuguese settlement of San Thomé. From the Rajah of Chandragiri he purchased, on behalf of the Company, a tract of land on the coast, extending five miles from north to south, and one mile inland. In the month of March, 1639, the factory was completed and with it a fort, occupied by 100 men, which he christened Fort St. George. That fort, 400 yards long by 100 deep, cost about £3,500. It served its purpose, and within its protecting walls Day died in 1642. On this foundation, laid in times of stress and danger, has grown Madras, the seat of the Government of the Madras Presidency, and the home of more than half a million people.

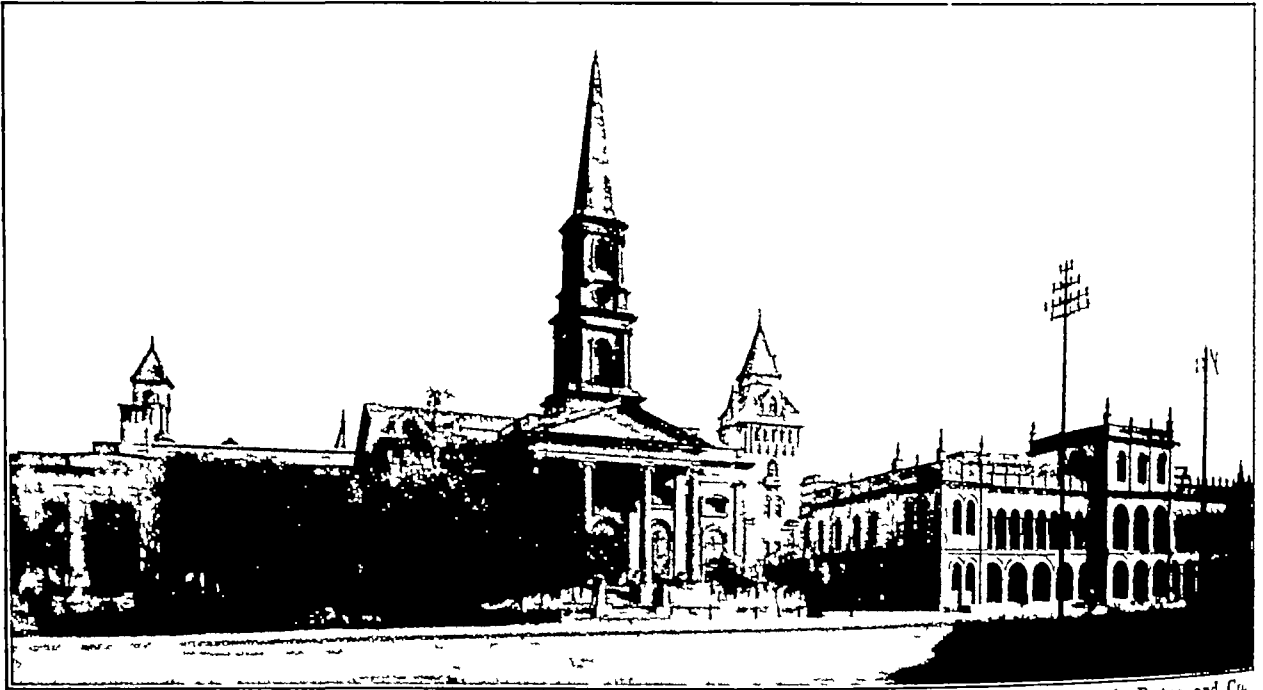
Founded primarily as a fort, during the 17th century, Madras—or, as it was then, and is still officially known as, Fort St. George—more than justified its existence. Those were turbulent days indeed for the old East India Company. A quaint combination of merchants, rulers, diplomats and warriors, the position of the East India Company was a peculiar one.

Two or three decades previously friction had arisen with the Dutch East India companies, who considered they had prior rights to the Far East. There was undoubtedly some ground for their assumption, for their ascendancy in the Indian Archipelago was firmly established on the basis of territorial dominion and authority. It was from the Dutch, too, that the first offer of co-operation was made, but that offer was summarily refused, and the following years were fertile in disputes between the armed traders of both nations. A "treaty of defence," drawn up to prevent disputes between the English and Dutch companies, had been ratified in 1619, and was effective—literally—for about an hour. The treaty proved to be as

town grew. Native resentment at the interference of the foreigner had never been quelled, although the successful defence of Surat, another of the Company's fortified factories, in 1664, had taught the turbulent Mahrattas lasting lesson of respect for English valour.

At this time relations between the English and French were entirely friendly, despite the fact that Marlborough was trouncing the French in Flanders. Thousands of miles away from the scene of the trouble, English and French merchants still followed their business on terms of friendship.

This state of affairs continued practically uninterrupted until 1744—a year fraught with disas-



[Photo A. Ratna and Co.]

ST MARY'S CHURCH, FORT ST. GEORGE, MADRAS
(The oldest Protestant Church in India, consecrated in 1680; and in it Clive was married)

valuable as the parchment upon which it was written, for hostilities continued as before.

This was the position which faced the East India Company during the early part of the 17th century. The state of affairs at sea was as bad as on land, if not worse, and the Company's servants had to be prepared, at any moment, to meet their Dutch, French, and Portuguese rivals.

From this necessarily brief explanation of the position of the East India Company, it will be seen that Madras, as the Company's strongest possession in the South, was of vast importance. In 1689 the three great Presidencies of Bengal, Bombay and Madras were established, and it was only natural that the fort built by Francis Day half a century previously should become the metropolis of the State. It was then that the real ruling career of the Company began. Trade increased steadily, although in the face of grave difficulties and dangers, and from a mere fort to protect two factories in the wilderness, a populous

trous happenings for Madras. In that year France and England took opposite sides in the war of the Austrian succession. While the Duke of Cumberland was fighting a losing battle at Fontenoy, French commerce was experiencing a thorough, uncomfortable, not to say dangerous, time at the hands of the English fleet at sea. Pondicherry itself, the French stronghold in Southern India, was threatened with capture by the English under Commodore Barnett. Such was the position when the Nawab of the Carnatic, professing untroubled friendship for both nations, stepped in as mediator. It was then that Labourdonnais, smarting under a sense of humiliation as the result of a heavy defeat at the hands of an English squadron, determined upon a reprisal, and on September 18, 1746, the French batteries opened fire on Madras.

It must be borne in mind that although Madras was the East India Company's principal stronghold in South East India, the population was com-

paratively small, and the garrison available to defend Madras against the attack of the French numbered 300 men, of whom at least one-third were civilians. The result was inevitable, the little English force fought valiantly for three days, but, at the end of that period, exhausted and considerably reduced in numbers, the garrison surrendered. Thus, after many years of vicissitudes, gallant Madras was removed from the list of English settlements in India.

With the peace of Aix-la-Chapelle, in 1749, Madras became once more an English possession. However far reaching the effects of that treaty might have been in Europe, its effects on India in general, and on Madras in particular, were com-

nations, and many and intriguing were the alliances formed with native princes by both sides, purely as precautionary measures. When the French, guided by the brilliant Dupleix, succeeded in placing their nominee on the throne of Hyderabad, they became undoubted masters of the situation in Southern India. For the greater portion of the two years following the return of Madras to the English, the French held practically undisputed sway in South India, but in 1751 Colonel Clive, by his brilliant defence of Arcot, overthrew Dupleix and, so doing, marked a turning point in Indian history.

It was peculiarly appropriate that Clive should have been primarily responsible for the overthrow



[Photo Klein and Peyer]

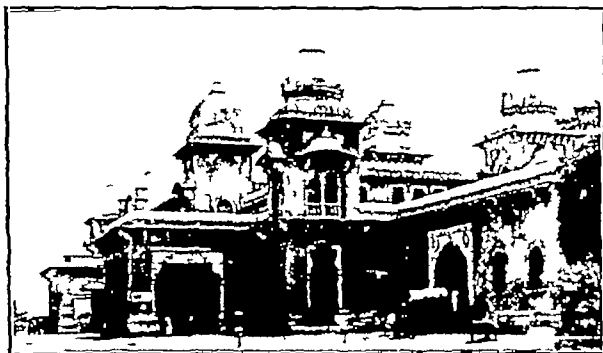
THE MARINA, MADRAS THE FINEST SEA-FRONT IN INDIA

paratively small, at least so far as guerilla warfare was concerned. The French, conscious of their own undoubted power, gave their ambitions full reign, and there gradually arose in Southern India a power which was an ever-present danger to the well-being, if not to the actual existence, of the East Indian Company. With their Sepoys drilled to perfection, well armed and brilliantly commanded, the French constituted a menace which the East India Company could not afford to disregard, and, accordingly, native troops were similarly trained. The Company strengthened its defences, and, as an additional precautionary measure, sought alliances with neighbouring princes. The French copied these tactics, and the position became interesting. The disputed succession which always formed a prominent feature of Indian politics, and was the foundation of so much intrigue, afforded ample opportunities to the rival

of the French in Southern India. Robert Clive had come out to Madras as a writer in the service of the Company, and, two years later, had taken part in the vain defence of that settlement against the French. When the fort surrendered, however, he made his escape in disguise, and, deserting the desk for the parade ground, soon evinced those brilliant qualities which were later to have such a far-reaching effect on Indian history.

Throughout Clive's honourable career, however, his defence of Arcot stands supreme. It was at his own request that he was allowed by the Governor of Madras, in 1751, to attempt to save Trichinopoly by a bold dash against Arcot. With a force totalling only 500 Englishmen and Sepoys, a few officers and three guns, Clive made his way to the gates of Arcot. A heavy thunderstorm was in progress, and, under its cover, he captured the

fort His magnificently organised and commanded defence, which held out for seven weeks against the repeated attacks of ten thousand native troops, marks him as one of the finest generals the world has ever produced This magnificent feat was the beginning of the end for the French

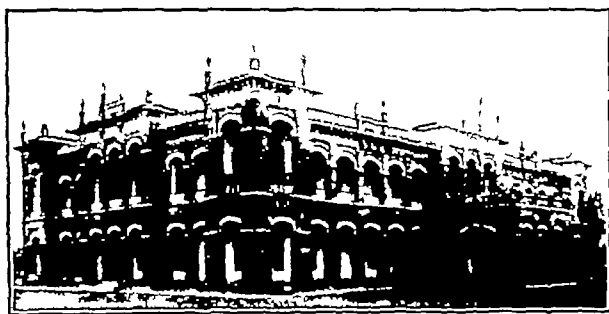


[Photo A Ratna and Co

EGMORE RAILWAY STATION, MADRAS

The war in the Carnatic lingered fitfully for two years With the capture of Pondicherry in 1760, England's last European rival for supremacy in India was defeated, and the East India Company entered upon a period of security and prosperity such as it had not previously known

Such was the result of Clive's brief but important connection with Madras Freed from the French menace, which had hampered its movements for so many years, warfare gave place to politics, and the satisfactory administration of Southern India became one of the most difficult problems to be solved It was in this connection that Madras became associated with Warren Hastings Like his contemporary, Clive, Hastings commenced his career as a clerk in the service of the Company at Calcutta With Clive's victory at Plassey, Hastings, who had risen steadily in the service of the Company, was



[Photo A Ratna and Co

MEDICAL COLLEGE, MADRAS

appointed Resident at Murshedabad He went to Madras in 1769, and in the Madras Council was second in command to Du Prc, the then President In this capacity he entered upon the work, entrusted to a Select Committee, of restoring peace in the Carnatic and adjusting the frequently recurring disputes with Tanjore At that time the Company was faced with grave constitutional difficulties, corruption was rife, and careless

investments and the trickery of native contractors were so serious that the very existence of an important section of the Company's activities was threatened The task of straightening out the tangle devolved upon Hastings, and, as the result of his investigations and his strong action a marked improvement soon became evident His excellent work at Madras did not go unnoticed, and in 1771 he was offered and accepted the post of Second in Council at Calcutta His connection with Madras, however, was by no means severed, and up to the time of his departure for England he was intimately connected with the administrative reform of the Southern India

So Madras flourished, but the net of intrigue which the administrators had woven, principally as a measure of protection against the French, had its sequel in countless petty and not a few serious wars, and it was not until the final overthrow of the infamous Tippu Sultan that an era of real peace began Thereafter, Madras developed, and if its growth was slow it was never



[Photo A Ratna and Co

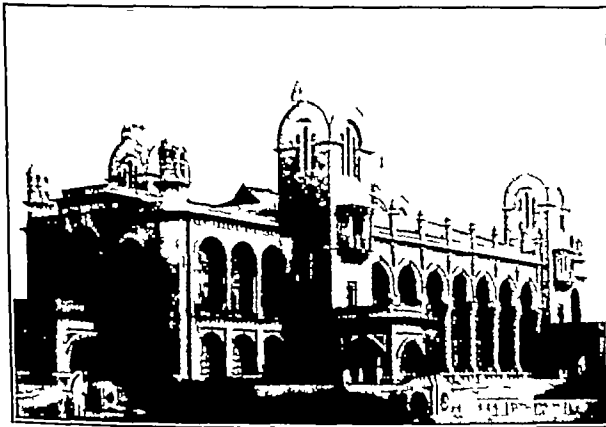
MADRAS CORPORATION BUILDING

theless sure, for to-day it stands, as already indicated, the third city in India and the most important in the South of the country The absence of a navigable river retarded the development of the city to no small extent, and, had the River Cooum been a wide, free-flowing river, instead of a narrow, sand-choked conveyor of refuse and filth as it is at present, the wealth and importance of Madras would have been immeasurably increased But, despite this handicap, the city has expanded, and if the administrators of the Honourable East India Company could rise from their graves, great would be their astonishment at the modern superstructure which has grown upon the foundation stone they so well and truly laid

Georgetown and Fort St George

Georgetown, once known as Blacktown, but renamed in honour of a visit from Prince George (now the King-Emperor) in 1906, is naturally enough rich in historical associations There are fewer more interesting places than the old Fort St George, which at present houses the Royal West Kent Regiment The fort itself, grown to

proportions undreamed of by its founders, is like a thriving, compact little city. The oldest surviving structure there is St. Mary's Church, which is the oldest Protestant church in the whole of India. First known as the "English Church," the foundation stone was laid on Easter Monday, April 1, 1678. To Sir Strensham Master must be given credit for its erection, for it was he who raised subscriptions and fathered the project generally. The church was intended primarily for the use of the officers of the East India Company who then lived in the fort. It was consecrated in October, 1680, and in it the marriage of Clive was solemnised. The steeple was added in the last decade of the 17th century. The church was badly damaged in the siege of Madras in 1758 and 1759, but it was not until nearly forty years later that it was rebuilt. The church contains many articles of striking interest, including a number of old registers which throw an absorbing, and often amusing, light on life in the shelter of the walls of the fort in the alleged



[Photo A Ratna and Co

SENATE HOUSE, MADRAS

good old days. There are also preserved in it an alms dish, presented by Elihu Yale, and a copy of Strensham Master's Bible, printed in 1660, which was presented to the authorities by Mr. C. G. Master, of the Indian Civil Service. Equally interesting relics are kept in the sanctuary, including a large altar piece—a copy of Raphael's painting of the Last Supper. The sanctuary contains the graves of Governor Nicholas Morse, a direct descendant of Oliver Cromwell, of Lord Pigot, who was in charge of the defence of the fort about the middle of the 18th century, and who was afterwards arrested and imprisoned by his own Council, of the famous missionary (and even more famous diplomat) Swartz, also of Sir Thomas Munro, the people's Collector of the Ceded Districts and afterwards Governor of Madras. Many others are buried in the sanctuary—men not well known, perhaps, but, nevertheless, men who did much for the Company and, in so doing, much for the future of Madras.

Other buildings of historical interest in the fort itself are the Secretariat Office, the Council Chamber of the Legislature of Madras, and the building at present used as the Officers' Mess.

At one time Madras merchants engaged in the sea-borne trade conducted their transactions at the Sea Gate and the colonnade of the old Banqueting Hall. This site was neither convenient nor business-like, and in 1787 Peter Massey Cas-sin, a free merchant, propounded a suggestion



[Photo A Ratna and Co

OFFICE BUILDING OF THE PUBLIC WORKS DEPARTMENT, MADRAS

that the town should be provided with a special building to serve as an exchange. A tract of land near the most easterly line of buildings in the fort was acquired, and, an old house which stood there having been demolished, a new structure was erected. It comprised warehouses and offices on the ground floor, while the first floor was given over for the use of merchants and dealers, and it became the first recognised Exchange in Madras. Later a broker's office, a committee room for the manager of the Exchange Company, and a public coffee room were installed. Its erection was paid for by funds out of public lotteries, and it became one of the most notable—and certainly one of the most useful—buildings in Fort St. George. The Exchange Hall was used for public meetings, the drawing of lotteries, and occasionally for entertainments. Thus, actually, it was the first theatre in Madras. The utility of the building did not end



[Photo Higginbothams Ltd

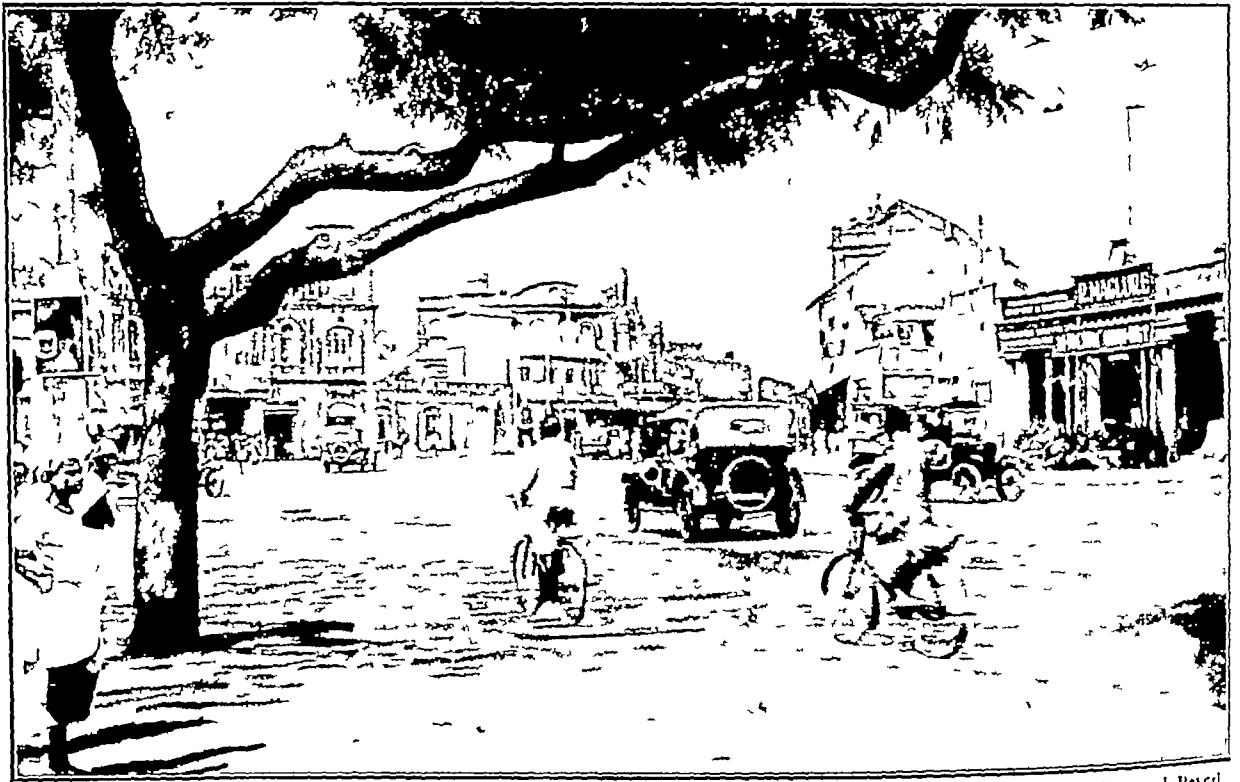
MADRAS CLUB

there, however, for it also included public auction rooms and a public subscription library. In later years the old Madras Bank was instituted on the ground floor, and for some time the "Exchange Tavern" was a greatly frequented portion of the building. In 1802 the jewels of Tipu Sultan were sold by public auction in the Exchange. Six years previously the Committee had erected on the roof a lighthouse, which was an iron-

framed structure, carrying 12 lamps, using coconut oil as an illuminant, and carrying a lantern reflector which threw the light 17 miles out to sea. The light was 90 feet above sea level at high tide. Such is the honourable, if varied, record of the building now used by the officers of the Royal West Kent Regiment.

So far as the fort itself is concerned, it is a splendid example of the skill and foresight of the 17th century engineers. It must be borne in mind that any scheme for the protection of Madras as it then was had to be based upon the erection of a strong wall round the existing buildings

Andrew Coyan. The outworks were completed about eighteen years later by Cearon Baker, the agent. Following this addition of the outer fort, the area between the inner and outer forts became the site of the dwellings of the European officers of the Company and their families, this being called the Christian or "White Town" just to the north of it, and separated from its northern wall by a wide street, lay the native quarters, Blacktown (now the populous Georgetown). The third phase was the development of what was to all intents and purposes only a walled town into a solidly constructed fortress, while the fourth was



[Photo Klein and Peyerl.]

MOUNT ROAD, LOOKING TOWARDS TAWKER FROM OPPOSITE MOTHIMAL, MADRAS

This wall, portions of which are still preserved, was not completed until 1770, after six years' work. When Madras emerged from its succession of wars and counter-wars the wall became of little practical use, although it remained a Government charge until about 1850. It then became obvious that unnecessary expense was being incurred, and Government maintenance ceased. A lasting memorial to this once important piece of fortification, and possibly to the cost of its maintenance in later years, lies in Wall Tax Road, a street lying within the line to the west of the wall. Government has erected a memorial tablet on the remains of the wall in Ravapuram.

To sum up in a few lines the history of the development of Fort St. George, it passed through four outstanding phases. First came the structure erected by Francis Dav (of whom mention has been made already) assisted by his chief,

an entire reconstruction and improvement of the fort, the shape of which then resembled, roughly, half an octagon.

The most imposing building in Fort St. George as it is to-day is undoubtedly the Council Chamber, where the deliberations of the Legislative Council of His Excellency the Governor of Madras are conducted. The old Council Chamber was contained in the building now in use as the Secretariat. The interior of the building is not unlike that of the British House of Commons. There are several visitors' galleries, a special gallery for the use of H. E. the Governor when he attends the House in order to listen to the deliberations, and two Press galleries, one of which is confined to the use of representatives of the vernacular newspapers. Proposals are under consideration, however, for the reconstruction of the Council Chamber. It is hoped to give members and visitors greatly improved facilities. In one respect

at least an improvement is urgently needed. As the building is at present constituted, the acoustic properties are execrable. No doubt the many electric fans with which the Chamber is supplied have much to do with this, but it is possible that a marked change will be effected when the reconstruction is carried out. In addition to the Council Chamber itself, the building includes a handsomely furnished room set apart for the use of the members, a room, equipped with a telephone, for the convenience of Press representatives, and a *tiffin* (lunch) room.

This Council Chamber was built in 1910. Prior to that date the Council, as has been pointed out,

recovered the looted property. The best of these columns were used in the first Council Chamber built, and are retained in the present structure.

Fort St. George has four gates. On the east is the striking piece of work known as the South Sea Gate, which comprises an entrance and exit for cars and carriages. The North Gate, leading to China Bazaar Road and the High Court, is closed to traffic. St. George's Gate is open day and night, and is the recognised entrance to the fort. This opens to the north-west and leads to the General Hospital and Poonamalee High Road. The Wallajah Gate, on the west, is reserved as an exit only for traffic.



FIRST LINE BEACH, MADRAS

[Photo Klein and Peyerl]

held its meetings in a room at the Secretariat. The increase in the number of members of the Council made new and enlarged accommodation an imperative necessity, and accordingly the present building was erected. At first the new Council Chamber consisted of only one storey but, with the introduction of the Reforms and the consequent further increase in the number of representatives, it was found necessary to add a second storey.

Considerable historic interest attaches to the black marble pillars which are a feature of the building as it is to-day. About 1830 Governor Pitt constructed a handsome colonnade from the Fort Square to the Sea Gate, lined with 32 pillars of Pallavaram "gneiss". When the French captured Madras in 1746 they carried off these columns to their stronghold at Pondicherry. There they remained for 25 years, until the British stormed the French stronghold and

Georgetown lies slightly to the north of the fort and is the centre of the majority of the business activities of Madras. Its proximity to the harbour makes it an admirably situated centre for the activities of the import and export merchants who have their offices there.

Street Scenes and Impressions

In Madras, as perhaps in no other city in the East, is there a more striking combination of the Occident and the Orient. This unique feature is apparent in more ways than one, but markedly so in the distinction between Georgetown and Madras City proper. Nor is this distinction any new thing, for from its earliest history "the Black Town" has been essentially the home of the native population, and to-day it retains all those typically Eastern characteristics it possessed when the total population of this portion of the Coromandel Coast was housed within the protect-

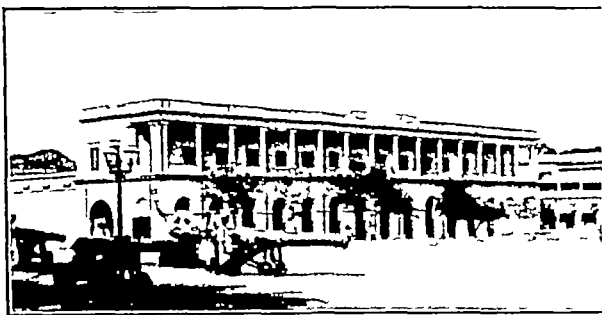
ing walls of the Fort St George The advent of Europeans in increasing numbers during the ensuing years, when the development of the settlement proceeded apace, of course, had its effect, but although much of Georgetown as it is to-day is like a busy European city, except for the picturesqueness of its inhabitants and the quaintness



[Photo A Ratna and Co
GOVERNMENT HOUSE, MADRAS.

of its buildings, those portions to which the European and his influence have not penetrated remain much as they did 200 years ago

It is this merging of the East and West which is such an attractive feature of Georgetown. Although no one will be prepared to question the utility of trams, motor 'buses, and electric lights, the visitor will admit that the quaintly towered and *bizarre* buildings and the Indians in the dress which has been the fashion from time immemorial, present a striking background and make the modern innovations seem utterly incongruous, even in the modernised Esplanade Road and its continuation, China Bazaar road. Converted Fords, carrying possibly twenty passengers, rattle along at excessive speed, pulling up among the screaming of brakes and the hoarse cries of the



[Photo A Ratna and Co
IN FORT ST GEORGE, MADRAS

conductors, beneath the very shadow of the High Court, the towers and windows of which are typical of the Hindu-Saracenic style of architecture that is so prominent a feature of Madras.

These 'bus conductors, it may be mentioned in passing are a class unto themselves. As the vehicle rattles along at thirty miles per hour, the conductor clings grimly with one hand and naked foot to the back, while the other foot and hand jerk madly in the air to each jolt of the 'bus. His eyes on the crowd of would-be passengers

assembled at the next stopping place, he screams with the full force of his lungs "Hai, Hai!" and then proceeds to howl in a clarion voice the virtues of the vehicle of which he is the financial manager, stopping occasionally to curse briefly but comprehensively the conductor of a rival 'bus which shows signs of overtaking him. Then there is the scene at the actual stopping place, where there may be three 'buses and one would-be traveller, three conductors arguing hotly about the merits and demerits of their respective charges, and apparently prepared to fight for possession of the solitary passenger, so that the latter is glad to climb hastily into the nearest vehicle to avoid further trouble.

Truly, 'bus travelling in India is a vastly more entertaining, if more hazardous, business than in England.

And, writing of arguments, a quarrel in Tamil, the principal language of Southern India, has to be heard to be properly appreciated. Despite the

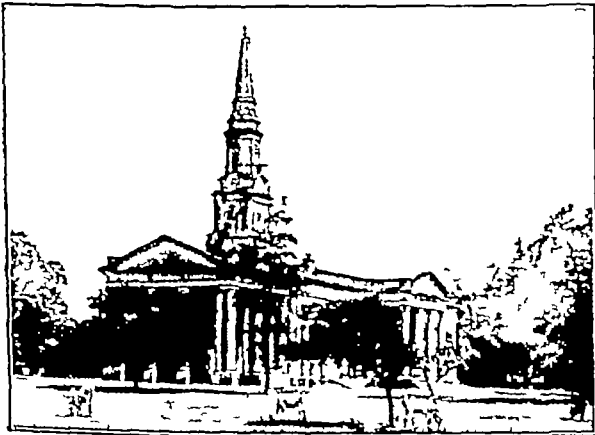


[Photo Klein and Peverl
CHINA BAZAAR ROAD
FROM PARRY'S CORNER, MADRAS

facilities afforded by *munshis*, very few Europeans succeed in mastering Tamil. The difficulty is that whereas the *munshi* teaches grammatically correct Tamil, the language as spoken in Madras consists almost entirely of colloquialisms, and the *munshi's* cleverest pupil finds that his flow of chaste Tamil is utterly incomprehensible to the Madrasite. In any case, a knowledge of Tamil is not by any means a necessity to the European in Madras. Since the introduction of free and compulsory education, night schools and classes, English is almost universally spoken in the city, and the *dhobi* (the washerman), the *mali* (gardener), the *dherzie* (tailor), and the *ricksha wallah*, all speak more or less fluent and at least understandable English.

But to return to Georgetown. The farther one penetrates into its devious streets and byways the more does one realise that for centuries past, figuratively speaking, has stood still. There is in evidence the same type of buildings, the same customs and the same dress as existed 200 years ago. Outwardly the place has not changed, its inhabitants, perhaps, are better educated than

were their forbears, and have the advantage of improved facilities for travel and recreation. A typical street tucked away in some almost inaccessible corner of Georgetown is narrow, squalid, and, to say the least, odiferous. Single-storey buildings, each complete with its own *pial*, or narrow verandah, line a road which is remarkable for the number and depth of its potholes. One can feed and rest inside and outside the verandahs. Decaying straw and refuse litter the road, naked children sprawl contently in the heat of the mid-day sun, graceful women, with heavy baskets or pots balanced upon their heads, swing past, swaying from the hips as they seek to preserve the balance of their often too heavy loads. The dress of these women is as simple as it is striking, and although designed primarily for freedom and utility, is invariably handsome. It consists of a short, tight-fitting bodice ending an inch or two above the waist, and a brilliantly-coloured saree—a length of cloth which acts as a skirt and from



[Photo Klein and Peyerl]

ST. GEORGE'S CATHEDRAL, MADRAS

the waist is hung over the shoulder. The usual male dress simply consists of a *dhoti*, or skirt, tied in a peculiar manner, and a shirt worn over that.

Even more simple costumes are to be seen. For instance, here is an elderly native, whose sole dress consists of a loin cloth and a pair of gold rimmed spectacles, seated in the shadow of his verandah working an up-to-date sewing machine—truly a striking combination of ancient and modern. Equally simple is the dress of the toddy-carrier, who passes by at a jog-trot with his two baked-clay jars of fermenting toddy from a wooden yoke balanced upside down across his right shoulder. Toddy, by the way, is the sap obtained from the top of the palm tree. Freshly drawn, and drunk before fermentation has commenced, it is a cool and refreshing drink, not unlike a sweet champagne. After fermentation, however, it is not pleasant to the European palate, and it is certainly highly intoxicating. Just as Sam Weller had never seen a dead donkey, nobody has seen a toddy carrier walking. He always proceeds at a jog-trot with a warning

“Hai, Hai”! to people who might obstruct his path. Many explanations have been advanced for this apparently unnecessary haste, but probably the most reasonable is that the constant jerking motion keeps the toddy in that state of fermentation which gives it the potency required by the native “tippler”.



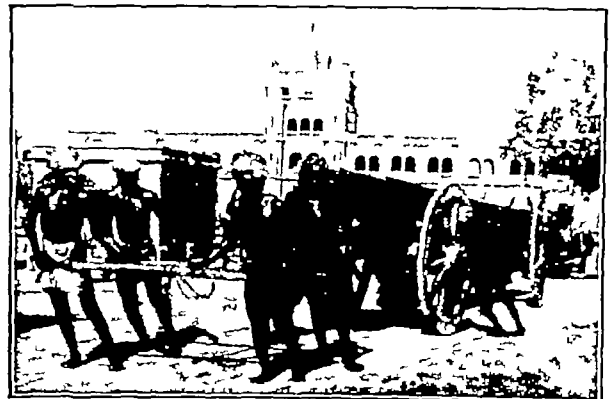
[Photo Klein and Peyerl]

CHINA BAZAAR ROAD, SHOWING PACHAPPAS COLLEGE, MADRAS.

There are fewer more pleasing pictures than that presented by a group of native Indian children, and their games have much in common with those of all lands. Their naked little bodies glistening in the burning sun (an English child would be badly burned within ten minutes), they play their own version of childish games which can be seen in practically every country of the world.

Kotwalchavadi Market

To see India as it is and has been for hundreds of years it is only necessary to visit one of the many markets which are scattered broadcast



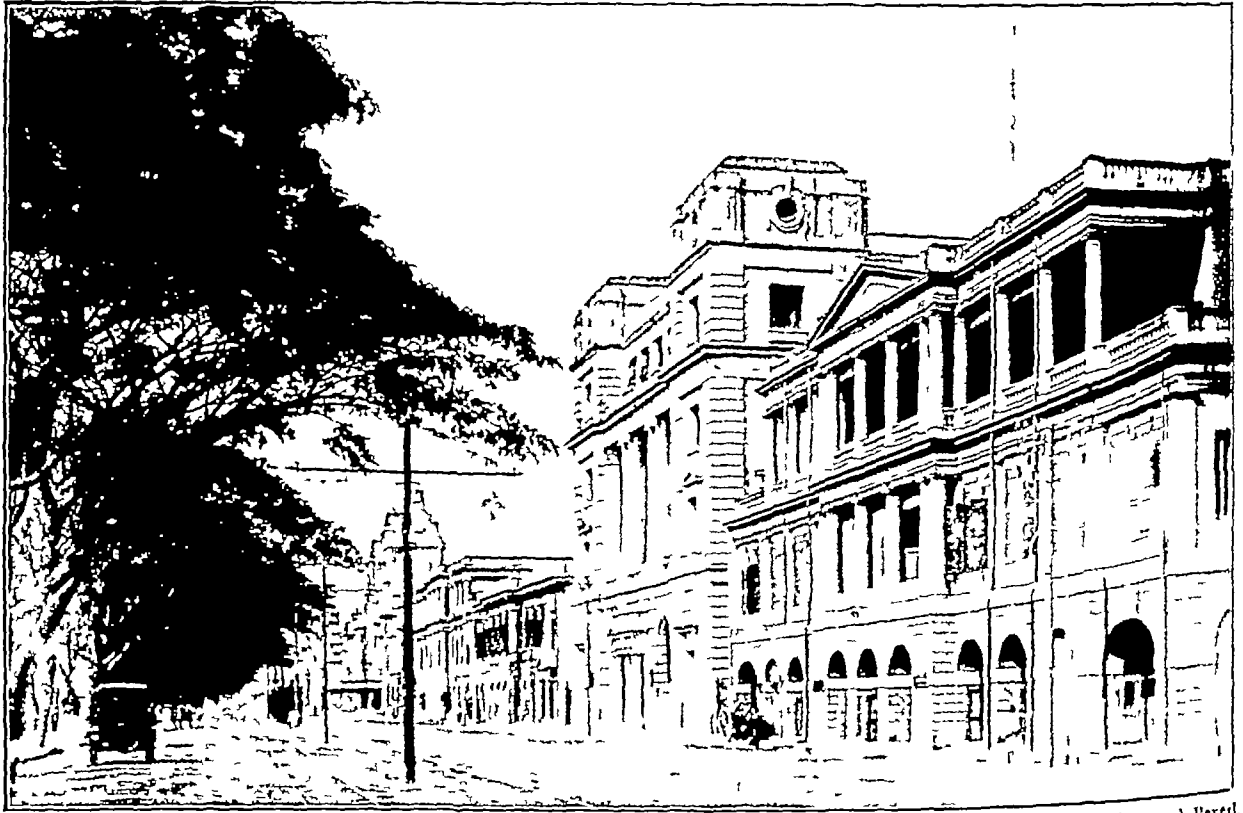
[Photo Klein and Peyerl]

COOLIES CARTING IRON BEAMS, MADRAS

over Madras. Take, for instance, the largest of them, Kotwalchavadi, a vegetable market in Georgetown. Indigenous fruits and vegetables of every description are there displayed on stalls which crowd many acres of land, leaving only narrow lanes packed with a surging mass of humanity, representing every caste and creed, for the convenience of the customers and visitors. Here, for

example, is a venerable old man, with flowing white beard, tangled hair, and liquid black eyes which, while apparently observing nothing, observe all. Assisted by his tiny grandson, a sprightly little fellow of five, naked as the day on which he was born, he is declaiming to an incredulous and slightly scornful Mahomedan, the merits of a pile of *mangoes*, arrived, he says, that morning from Salem, in which district the finest of these delicious fruits are grown. A Western fruiterer might obtain a lesson in successful, if unorthodox, salesmanship from the old man, who gesticulating wildly, explains to all caring to listen that he is a poor man, has an old wife and

increasing throng, the black, lightning streaks, impudent crows as they swoop to retrieve some neglected dainty from the very feet of the crowd combine to make a picture bewildering in its infinite variety. Brahmins, non-Brahmins, caste men, non-caste men, Nairs and outcasts, Mahomedans, Indian-Christians—indeed, every tribe, caste, and creed, has a representative in the clattering throng. Half starved pariah dogs, their ribs sharply defined through their diseased skins, cower beneath the shadow of the stalls, awaiting an opportunity to snatch some desirable morsel and beat a hurried strategic retreat before their depredations are discovered by the irate dealer



FIRST LINE BEACH, MADRAS

[Photo Klein and Peytel]

many fatherless grand-children dependent upon him. His stomach is empty and his heart is filled with woe. Are not his *mangoes* the best fruits in the market? Is not the price he asks reasonable? He appeals to the crowd of interested spectators. After half-an-hour's haggling he gets the price he demands or, possibly, if the customer remains obdurate, makes a reduction of a few *pie*, complaining bitterly that he is being robbed. Similar scenes are being enacted in all parts of the market, for no Indian dealer thinks of stating a fixed price. The haggling which ensues, combined with the cries of itinerant vendors of sweetmeats and the "pad, pad" of bare feet on the burning ground, makes an indescribable din. The ever-changing colours of brilliant sarees of fine silks, the reds, blues, and greens of turbans, the flash of brown bodies, streaming with perspiration, as heavily laden coolies force a passage through the ever

Pervading everything is the unmistakable odour of perspiring humanity. Here is the East typified—the unchanging East, representing India as it was centuries ago and probably as it will be in the centuries to come.

Chief Thoroughfares

One of the principal thoroughfares of George town is Mint Street, which runs through the entire length of the town. Almost the whole of the southern portion of the street is occupied by Chetties—Linga Chetty's caste men. The centre portion provides homes and business premises to Marwaris and Guzaraties (this part being known as Sowcarpet), while the northern section is occupied by residents of other castes. Thus, it will be seen that Mint Street, typical of the country, is divided and sub-divided under the caste-system which has ever prevented India from

becoming a united nation At the end of Mint Street is the Government Press, which is contained in a building once used as the Madras Mint, from which the street derives its name

"Seven Wells," which at one time supplied water to the garrison and the European residents of the fort, is also here Adjoining is another street of considerable business and commercial importance—Govinda Naick Street Near by are Godown Street and Bunder Street, which are occupied by piece-goods merchants, the majority of whom are of the Mahomedan community, as well as cloth merchants in a comparatively small way of business

of marsh along which ran drainage water and the monsoon rain Stephen Popham, a solicitor, whose name the street immortalises, reclaimed the land on either side of the channel, or Broadway, earth from Hog Hill being utilised in the work of reclamation Houses were built and streets formed on either side of the channel, which continued to function as a carrier of rain and refuse—and almost certainly as a prolific breeding ground for mosquitoes!—until 1782, when it was filled in It is difficult to visualise the appearance of Broadway 115 years ago when one sees it as it is at present For most part, the street is narrow, and the frequent passing of the electric



GENERAL HOSPITAL ROAD, MADRAS

[Photo Klein and Peverl]

Facing the Esplanade—a convenient way to the General Hospital or to the Marina—is a handsome structure built on Grecian lines, viz, Pachaiyappa's College, an educational institution of considerable importance It is a first grade College, training students for the arts degrees of the Madras University The College derives its name from the founder, for it was the outcome of one of the many charities of Pachaiyappa, a merchant and *dubash* who flourished in the days of the East India Company Dealers in all classes of goods are to be found in Stringer's Street, Davidson Street, and other adjoining thoroughfares

Running north and south from the Esplanade to the Black Town is Popham's Broadway, another street of great importance and rich in historical associations It is difficult to realise that this thoroughfare of business activity once formed a channel which marked the centre of a large tract

of marsh along which ran drainage water and the monsoon rain Stephen Popham, a solicitor, whose name the street immortalises, reclaimed the land on either side of the channel, or Broadway, earth from Hog Hill being utilised in the work of reclamation Houses were built and streets formed on either side of the channel, which continued to function as a carrier of rain and refuse—and almost certainly as a prolific breeding ground for mosquitoes!—until 1782, when it was filled in It is difficult to visualise the appearance of Broadway 115 years ago when one sees it as it is at present For most part, the street is narrow, and the frequent passing of the electric

trams, which form the most popular and convenient mode of transport in that part of the town, does not tend to improve traffic conditions Loane Square, where band concerts are frequently given, is an open space to the west of Broadway, while close by is Kotwalchavadi, the huge market typical of the country, and always of absorbing interest to visitors At the south-eastern end of Georgetown was the residence of Signor Niccalao Manucci, a Venetian physician who practised in Madras about 1686, after having seen service under the Moghul Emperors An interesting record of his experiences in India is contained in *Storio Du Mogor*

A magnificent structure, built entirely of sandstone brought from a quarry fifty miles north of Madras, is the Y M C A, which faces the Esplanade The work of this organisation in all parts of the world is as well known as it is appreciated, and a special and valuable feature of its

tance, towers and minarets loom out ghostlike and enchanting, flickering lights, apparently dancing like will o' the wisps through the air, mark the site of the thatched village where live simple fishermen who exist by the harvest of the sea, and the strengthening breeze rustles gently through the leaves of the graceful palms. The scene is indescribably beautiful, and there is no wonder that the Marina is claimed as the greatest asset Madras possesses.

West of the Marina, facing the sea, are some imposing buildings. The Octagan Marine Villa (which is suggested as the site of the new University Library), the Senate House, with a noble statue of Queen Victoria near by, the offices of the Board of Revenue (formerly the Chepauk Palace of the Nawab of Arcot), the Brahmin Widows' Home (a substantial building erected in 1840 and then used as a house for storing natural ice brought from America), Queen Mary's College for Women (which now includes Capper House), and the Offices of the Inspector-General of Police (at one time the Masonic Temple). The only building on the east side of the Marina before San Thomé is reached is the Aquarium, containing a weird and wonderful collection of fish and sea snakes captured in Madras waters. The Aquarium is perhaps the most popular resort of casual visitors to the city.

Many of the buildings mentioned as being on the west of the Marina, including the Senate House, the Offices of the Board of Revenue, the Chief Engineer's Office, and the Presidency College, are sited in the Chepauk Park, through the centre of which runs the Buckingham Canal (a waterway now little used, dividing the whole of the Madras from north to south). Other portions of the park are occupied by the Madras Cricket Club grounds and pavilion, Victoria Hostel for Students, which was erected by public subscription, and the Government Hospital for Women.

San Thomé

Marking the south end of the Marina is San Thomé, which was a thriving Portugese settlement when Francis Day founded Madras nearly 300 years ago. The date of the actual settlement of the Portugese at San Thomé is difficult to fix definitely from existing records, but it was certainly not later than 1552. Naturally, in view of the nationality of the pioneers, a church, to which was attached a monastery, was the first substantial building to come into existence there. Around it a town was built, and, backed by the natural business capacity of the Portugese, it became an increasingly thriving centre. Like other foreign settlements, however, it had its vicissitudes, there were wars and rumours of wars for many years, and internal strife had much to do with its decline. Prior to the arrival of the English, as at first represented by Francis Day, San Thomé was a fair mark for the Dutch, who were practically at the height of their power in India. So much were the Portugese at the

mercy of the Dutch, who raided them frequently and carried off a great deal of plunder, that they raised not the slightest objection to the settlement of the English a mile or two to the north—the explanation being, of course, that they saw in their European neighbours a possible ally against their Dutch enemies. After the arrival of the English the power of San Thomé declined rapidly, so much so that in 1662, threatened by two enemies, it accepted the lesser of the two evils and yielded to the Mahomedans, who held it for eleven years. Thereafter it was occupied by the French for two years, but not without constant threats from the Dutch and the Muslims. Several times the place changed hands until eventually, in 1749, it was conceded by Mohamed Ali to the English.

San Thomé to-day is a quiet, sleepy old town, notable principally for its fine cathedral. The town obtains its name from its association with the apostle who, according to tradition, is buried there. Another story, which gains credence in the locality concerned, is that the apostle was buried at St Thomas's Mount, a station about eight miles from Madras.

Mount Road

The three most important roads in Madras are Mount Road, Poonamalle Road, and Beach Road, the last of which has been dealt with already. Mount and Poonamalle Roads are military roads, and the former is the centre of the European business activity in Madras. Passing down Government House Road from the Marina, with the Cooum on the right, the beautifully laid out and well-kept gardens on the right are those of Government House, the official residence of His Excellency the Governor, Viscount Goschen of Hawkhurst, Viscountess Goschen, and their personal and military staff.

Like most buildings in Madras, the residences of successive Governors of the Presidency have suffered many vicissitudes. The site now occupied by the General Hospital and Medical College was, nearly 250 years ago, a Garden House erected for the use of the then Governor. For more than sixty years that official residence was in use until its destruction by Labourdonnais, when he occupied Madras in 1746. It was not until nearly twenty years had elapsed that a site in Triplicane was acquired, where the authorities erected a large and imposing building that formed the nucleus of the present Government House. Five years after its erection the establishment was partially destroyed, again by the French, who were besieging the city. In 1762 the damage caused by the French was repaired, and in the following years considerable reconstruction work was carried out. The most important additions were made in 1802, when the Banqueting Hall was built. This internally and externally magnificent structure is now the scene of all the important State functions. Considerable improvements and structural alterations were carried out by

Lady Willingdon during the tenure of office of Lord Willingdon as Governor. Government House at present is an imposing and commodious structure eminently adapted to the purpose for which it is used. It stands in magnificent grounds, containing a golf course and tennis courts, and it has also a swimming bath.

There are fewer, if any, more magnificent scenes than those presented at the Banqueting Hall on the occasion of a State Ball. Hundreds of electric lights, flashing from huge chandeliers, are reflected by brilliant jewels and gleaming silks. The scarlet clad *souars* of H.E. the Governor's Bodyguard, with their silver tipped lances and fluttering pennons, line the walls, the soft *frou frou* of ladies' dresses, the magnificent dresses and jewels of native princes, and the gleam of decorations and ribbons combine to make an altogether unforgettable scene.

Immediately facing Government House, on the opposite side of Mount Road, is Napier Park, a public park laid out and formally opened in 1871. Behind that is Chintadripet, a village which was founded by an Englishman in 1871 for the purpose of encouraging the indigenous manufacture of calico. In passing, it is interesting to note that the site was chosen because of an abundance of large trees, offering ample shade to the men who worked under them.

Reference has been made already to the curious combination of East and West which is such a feature of Madras. This is again the case with Mount Road, the European shopping centre of the city. The traffic—tramcars, motor 'buses, and cars—is such as one would meet in any Western city. For the greater part of the day the road wears the sleepy, brooding aspect of a country market town in England, but wakes into sudden activity when the business places release their thousands of workers in the evening. It is then that the Western appeal is utterly overshadowed by the East. Very few natives have adopted European costume, and a street thronged with thousands of hurrying natives is exceedingly picturesque. Here one meets representatives of all types, from the almost naked beggar, twisted into some fantastic shape and appealing hoarsely for alms, to the gorgeously clad Punjabis. The severe white *Khaddar* clothes and white caps of the Swarajists form a striking background for the coloured turbans of the men, the brilliant *sarees* of the women, or the gleaming brown bodies of the children. Panting *rickshaw wallahs*, perspiration streaming from their lithe frames to the ground, trot tirelessly along hauling their too heavy carts and their passengers. The padding of thousands of bare feet on the still hot asphalt is drowned by the clanging of tramcar bells, the hooting of motor horns, and the many other noises that are inseparable from an Indian street scene.

Women, with their low portable stalls, do a roaring trade in *betel nut* and native sweetmeats, the ubiquitous toddy carrier maintains the rapid pace he has kept up for miles, *pariah* dogs nose

hungrily in the gutters, and motor 'buses pull up amid screaming of brakes and the racuous cries of conductors. Yet within an hour the street is comparatively deserted except for motor traffic. As night descends lights spring up everywhere, and the darkness lends an air of romance to the most mundane building. That striking edifice ahead, for instance, with its quaint towers and minarets outlined against a star-flecked sky, might appear, to the stranger, to be the town residence of some mighty Rajah. But, alas, no! It is nothing more romantic than a photographer's shop!

Where Cathedral Road and Nungumbaukam High Road run into Mount Road, is St George's Cathedral. Built by Lieut-Col T. F. De Havilland in 1815, it is a handsome and stately building in the Ionic style. The columns are finished with a peculiar plaster-like substance which resembles polished marble. Cathedral Road proceeds directly to the south end of the Marina, while



[Photo Klein and Peverl]

A RECKLA, MADRAS

Nungumbaukam High Road passes through a residential quarter of the city. Opposite the Cathedral, on the same side of Mount Road, are the gardens administered by the Agri-Horticultural Society of Madras. These gardens are not only ornamental, containing as they do varieties of all the principal flowers and vegetation of the South of India, as well as foreign types which have been transplanted and carefully reared, but they have a strictly utilitarian value. In February of each year an exhibition is held, which, besides fostering a love of gardening for its own sake, gives opportunities for local horticulturists to win valuable prizes. A great many experiments and demonstrations of value to agriculturists have been carried out there also. The gardens of the Society offer facilities which are taken advantage of by many residents of the district who like a walk amidst beautiful scenery in the morning or in the cool of the evening.

Nungumbaukam High Road leads to the historically interesting village of that name. When this village was granted to the English in 1708 a small redoubt was built there, and, although

there is no trace of it at present, records show that it actually did exist

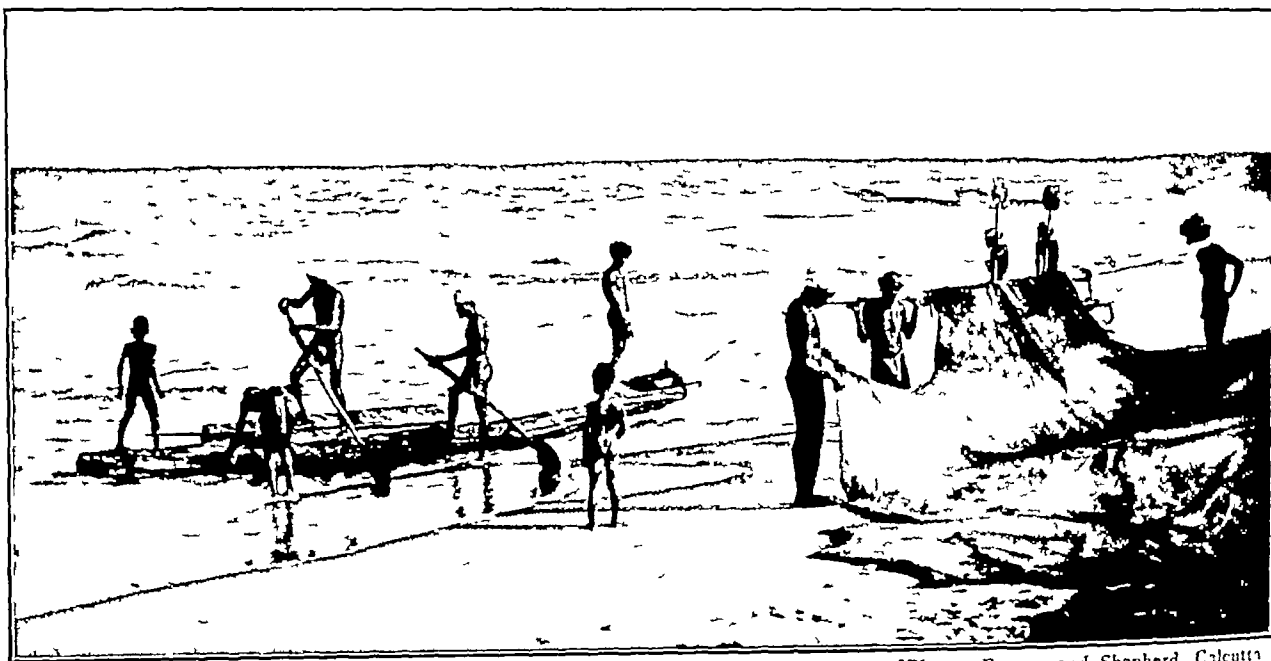
Passing farther along Mount Road, near the fourth mile stone, one comes to the site formerly occupied by the memorial to Lord Cornwallis, which has since been transferred to a site opposite the Post Office on North Beach Road. Many years ago, before the Marina had attained its present popularity, the drive which surrounded the Cenotaph at its old site was a favourable promenade, and, as such, was the scene of numerous public and official functions. It was here that the Officers of the General Staff received Sir Samuel Auchmuty when he returned to Madras fresh from the conquest of Java.

Native Districts

At the Round Thana, Wallajah Road leads into Chepauk and Triplicane. The latter suburb was

glory. There were many Muslims living near the Palace, on which they were almost entirely dependent. When the power of the Palace waned these dependants remained, and to-day Chepauk is what it always was—one of the poorest and most congested Muslim parts of Madras. The buildings, practically without exception, are dirty and squalid, but as a background they offer a remarkable contrast to the fine mosque, a stately pile of granite, which rises in their midst.

Slightly to the north-west of Triplicane is Tiruvateeswarampet, which contains a Temple of Siva. This suburb enjoyed complete independence for many years, as for some reason it was not held to be within the jurisdiction of the East India Company until the early part of the 18th century. Amir Mahab, the Madras residence of the Prince of Arcot, is located in Pudupakam,



[Photo Bourne and Shepherd, Calcutta]

CATAMARAN FISHING BOATS, MADRAS

granted to the English in 1658 and is now an almost purely Hindu residential quarter. Its ancient Vishnu temple attracts many visitors. About fourteen years after the English were given Triplicane, this Temple was occupied by the Mahomedans and, in the following year, by the French. A few months later it fell into the hands of the Dutch, and it was not until the English finally asserted their authority that the temple began to be undisturbed. Otherwise, there is little of note in Triplicane, if one excludes its picturesque, if often squalid, bazaars.

Chepauk

While Triplicane is essentially Hindu, its neighbouring suburb, Chepauk, is equally Muslim. The settlement of the Mahomedans in this crowded part of the city dates from the time when Chepauk Palace was at the height of its

another near-by suburb which was granted to the English by the Mahomedans in 1742.

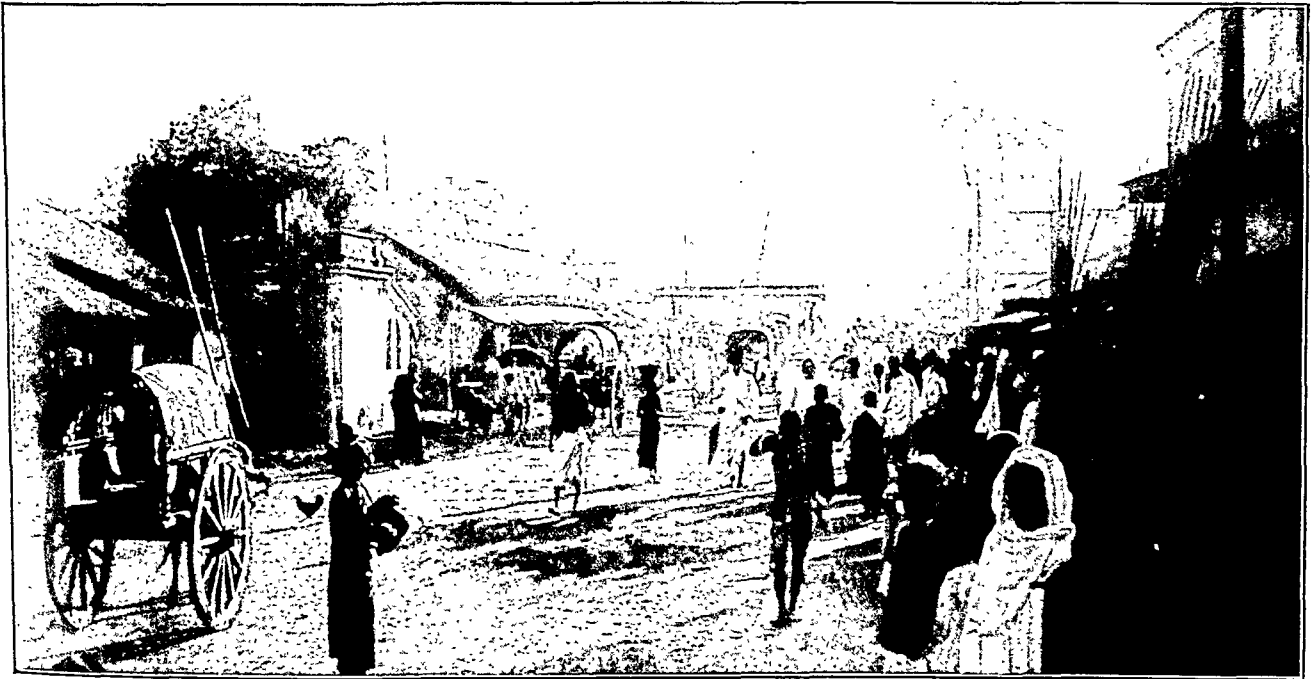
Egmore

Facing Wallajah Road, across the principal thoroughfare, is Harris Road. This road crosses the River Cooum, over Harris Bridge, which is a comparatively recent construction. To the southward of this road is Pudupet, the dwelling-place of Indian Christians, Mahomedans, and hundreds of *Adi Dravidas*, or the depressed classes. Harris Road passes through a bazaar into Egmore, a suburb which is claimed to be the healthiest residential quarter in Madras. However that may be, it certainly contains some splendid bungalows set in spacious compounds. Egmore came into English possession towards the close of the 17th century, when it was granted to Governor Hinginson by a powerful Muslim, Vizier Assad Khan.

Police Commissioner's Road gains its name from the fact that the Police Commissioner's office and Reserve Police barracks are quartered there. The Government Ophthalmic Hospital, equipped with every modern requirement, is only a short distance away. Another notable example of the Hindu-Saracenic style of architecture is the Egmore Station of the South Indian Railway, which is a magnificent structure with two porticoes, facing south. Another fine building in Egmore is Arni House, the residence of the Jagirdar of Arni.

Separating Egmore from Pudupet is Pantheon Road, a thoroughfare which possibly attracts more visitors—and people of every nationality—than any other portion of Madras. Its three buildings which constitute the principal appeal to visitors are the Victoria Technical Institute,

A collection of geological specimens presented by the Madras Literary Society 75 years ago formed the foundation upon which the present fine Museum has grown. It is now a splendid pile of buildings, which includes a theatre greatly in demand during the Madras season for charitable entertainments and concerts. The exhibits of most value in the Museum from an educational point of view are contained in the archæological section, and comprise sculptured marbles from the railings of the Buddhist *stupa* at Amaravati (a fragment of which, tradition says, is a portion of the bones of Buddha), and a collection of weapons and armour from Fort St. George and Tanjore Palace. Another feature is a fine collection of coins, depleted, however, by some of which were stolen a few years ago.



[Photo: Klein and Peyerl.]

PYCROFT'S ROAD, TRIPPLICANE, MADRAS.

the Government Central Museum, and the Connemara Public Library.

The Victoria Institute is a typically Indian structure, and it contains a wonderful selection of the best products of the craftsmen of South India. Here the visitor may examine delicately carved ivory and sandalwood, brassware, tables, silks, beaten silver, copper inlaid with silver, and hundreds of other articles, which are eloquent evidence of the wonderful skill and patience of the Indian craftsmen. Parties of American "hustlers" engaged in a two-weeks' comprehensive tour of India, frequently arrive in Madras with a carefully thought-out programme, which invariably includes a visit to the Technical Institute. It is a complaint of the management that they usually buy up half the stock and leave nothing for regular patrons!

The Connemara Public Library, opened in 1926, is attached to the Museum. Inside is a marble statue of Lord Cornwallis, which stood in Fort St. George for more than 100 years before being removed in the early part of this century. It was then in a state of considerable disrepair, but an Indian sculptor worked wonders upon it. Other buildings of note in Egmore are the Women and Children's Hospital and the Presidency Training School of Mistresses.

To return to Mount Road, the next street of any importance is General Patter's Road. Passing the once popular but now defunct Brind's Hotel on the left, a short distance away is the Madras Club, the leading Club in Madras. The road passes Pycroft's Road into Royapettah, where the Wesley College is situated. Close by is a comparatively recent building, the Royapettah Hospital. At one time administered by

the Corporation of Madras, it was handed over and became a Government charge in 1919. The Lloyd, Edward Elliot, and Luz Church Roads are other important highways in this part of Madras, and embrace a tract of land which contains the residences of Indian judges, vakils and merchants.

The church from which Luz Road obtains its name has an interesting tradition attaching to it. The story is that over 300 years ago a terrific



[Photo: Klein and Peyerl.]

HEADQUARTERS OF THE THEOSOPHICAL SOCIETY.

From across the Adyar River, Madras.

storm arose off the coast of Madras. The crew of a storm-tossed ship, realising that if she went aground she would be immediately battered to pieces by the terrific breakers, vowed that if they were delivered from the fury of the sea they would build a church and dedicate it. Immediately a clear, guiding light flashed from the shore, and the mariners made a safe anchorage. Once ashore, they set off in search of the light which had been their salvation. They made their way for about a mile inland, but when they reached the spot from which the light appeared to be coming the beacon incontinently vanished. On that spot, tradition says, they founded the present Church of Our Lady of the Light. Whatever truth may be in this story, Luz Church is certainly about 300 years old. An inscribed stone bears the date 1516, but there is no evidence to show that this date is authentic, and the church is believed to have been erected some time between 1547 and 1582. Close by is Teynampet, which has no buildings of outstanding architectural value, except perhaps for the residence of Sir C. P. Ramaswami Iyer, Law Member to the Government of Madras and Indian Delegate to the League of Nations. This bungalow was formerly the residence of Davidson, an old Madras Governor.

Mylapore.

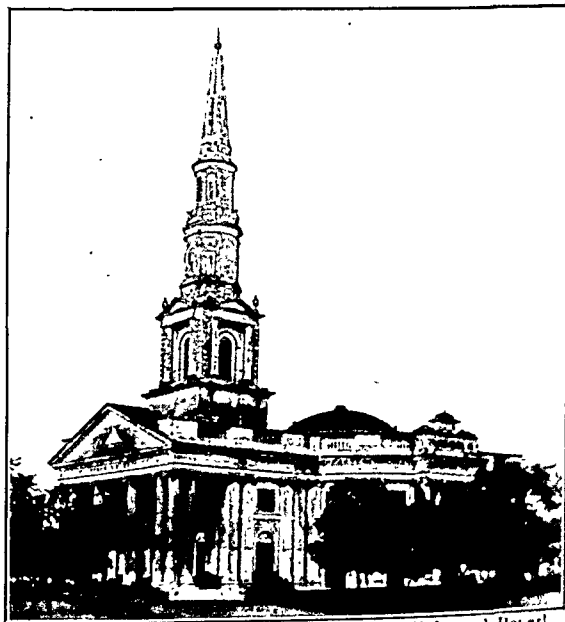
Mylapore, a suburb which begins at Luz Church, is undoubtedly one of the oldest parts of Madras. Its name means "Peacock City"—a reference to the peacock standard which was an important part of the regalia of ancient Tamil kings. However much other parts of the city might have progressed, Mylapore retains the appearance it must have worn 100 years ago, and is a typical example of a sleepy Indian village.

Adyar.

From Mylapore, Brodie's Road leads into Adyar, the most important European residential quarter of Madras. The bungalows there are stately, mellow old places, many of them having been built for the accommodation of the officers of the East Indian Company. The Adyar Club commands a delightful prospect over the River Adyar, while close by is the Madras Boat Club. Just outside the Municipal toll gate is the Elphinstone Bridge across the Adyar. On the opposite side of the river is the handsomely laid out compound of the Theosophical Society, whence Mrs. Annie Besant introduced to the world the Indian youth, Krishnamurti, as the embodiment of the new Messiah for the redemption of humanity. Only a mile or two distant is Elliott Beach, a favourable spot for bathing, and named after the son of the Right Hon. Hugh Elliott, a former Governor of Madras.

Madras Observatory.

One of the most important institutions of the city of Madras is the Madras Observatory, which was constructed in 1792 under the supervision of Michael Topping. The first instruments used of Michael Topping. The first instruments used there were the property of William Petrie, who



[Photo: Klein and Peyerl.]

ST. ANDREW'S CHURCH, MADRAS.

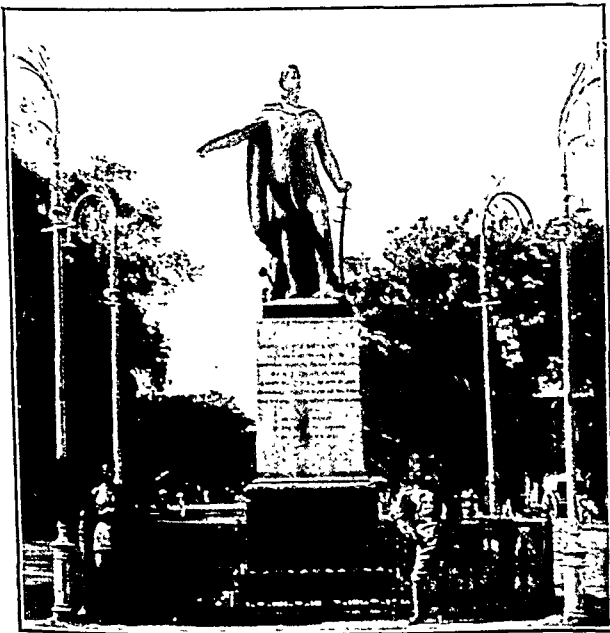
observatory. He had for an assistant John Goldingham, a Fellow of the Royal Society, who was so versatile that he combined the duties of engineer, mathematician, architect, editor, and astronomer. He succeeded Petrie as Astronomer. The initial success of the Observatory, which was the first to be officially established by the English in the East, was undoubtedly due to Petrie, who, besides possessing all the qualifications necessary for a task about which so little was known, had a keen capacity for administration and great literary instincts.

When the Solar Physics Observatory was established at Kodaikanal, a Hill Station admirably adapted for the purpose, the work at the Madras Observatory became very much lighter. Meridian observations are made for determining the time and maintaining an efficient time service, which is effected by a daily transmission to the telegraph office in Madras.

The Deputy Director of Public Instruction has his offices in the spacious hall of the old building formerly occupied by the College for Junior Civil Servants. Another portion of the building is occupied by the Madras Literary Society and Auxiliary of the Royal Asiatic Society. Here there is a remarkably fine library, consisting of more than 50,000 volumes.

Anderson's Road and Bridge.

Anderson's Road and Bridge, by the way, take their name from Dr. Anderson, who founded the famous Botanical Garden, which covered an area of upwards of 100 acres in extent. It is interesting to note that portions of this once famous garden still exist in Pycroft's Garden and Tullock's Garden. A number of narrow lanes—some of them reminiscent of England—lead by devious ways into Nungumbaukam High Road. Opposite, by the Cathedral, is Cathedral Road, which,



[Photo: Klein and Peyerl.]

The famous Neill Statue on which many attempts at destruction have been made recently by Indians at Madras. The inscription on the statue is as follows: James George Smith Neill, C.B., Aide-de-Camp to the Queen, Lieutenant-Colonel of the Madras Fusiliers, Brigadier General in India. A brave, resolute, self-reliant soldier, universally acknowledged as the first who stemmed the torrent of Rebellion in Bengal. He fell gloriously at the Relief of Lucknow, 25th September, 1857. Aged 47.

avenued as it is for the greater part of its length, is easily the most beautiful highway in Madras. It provides a direct route from Mount Road to the Marina, passing the Theological College at the junction of Mowbray's Road. The latter road has its termination at the entrance to the ground of the Adyar Club.

Poonamallee Road.

Another road containing many important buildings and public offices is Poonamallee Road, which may be entered from Mount Road, directly from the harbour through Georgetown, through the suburb of Egmore, or from the main gate of Fort St. George. Entering the road by the last mentioned route, the Medical College is on the left, while on the right is the Hall erected to commemorate the fact that Madras escaped the hor-



[Photo: Klein and Peyerl.]

TYPICAL SCENE AT MADRAS.

rors of the Indian mutiny. The Bible Society and Christian Vernacular Society's premises, from the exterior, show little evidence of the remarkable work which is there carried on, including the printing of New Testaments and books in Tamil, Telegu, Canarese, Malayalam, and Urdu, and the other vernaculars of Southern India. The imposing stone structure close by comprises the well-equipped offices of the Madras and Southern Mahratta Railway. The site it occupies was formerly covered with squalid tenements known as John Pieriera's Quarters, which had degenerated from a once fashionable part of the city to a slum of the worst type.

Madras General Hospital.

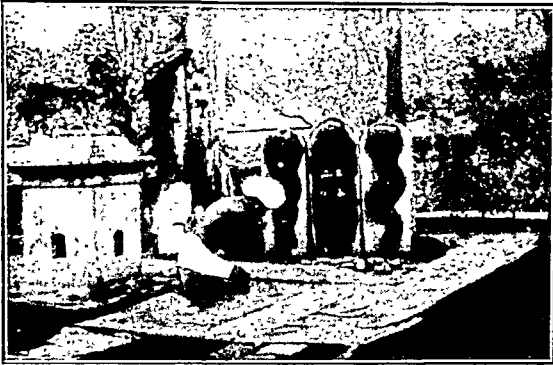
The Madras General Hospital, almost immediately opposite, is the largest and best equipped public hospital in Madras. At one time the two chief healing centres were the Garrison Hospital and the old Naval Hospital—the latter dating from 1744—but these were amalgamated into their present form. The General Hospital has undergone many structural alterations and improvements, and, at the time of writing, the Government of Madras has on hand a scheme costing several lakhs of rupees to make the building as commodious and up-to-date as possible.

Central Station Scenes.

Catching a train in England is a comparatively simple process. The business man swallows his breakfast in haste, sprints to the station, and just manages to catch his train. In India catching a train is perhaps less exciting but infinitely more picturesque, at least so far as the native is concerned. There are fewer more interesting

scenes in Madras than those presented at the principal railway station, the Central Station of the Madras and Southern Maharatta Railways, particularly at night, when the glare of the electric lights throw into vivid relief the scurrying crowds thronging the platforms when the mail trains are about to depart.

The railway traveller at Home, missing a connection, and faced with the prospect of some hours' wait on a dreary platform, is, of course,



[Photo: Klein and Peyerl.]

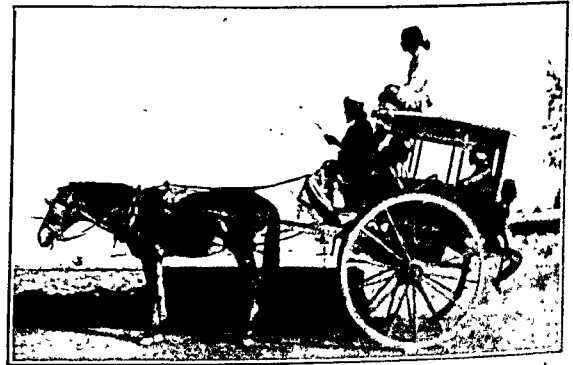
SNAKE WORSHIP, MADRAS.

unspeakably annoyed. Not so the Indian, who is a patient soul, and it matters but little to him whether the train leaves in some hours or some days. He can wait, for he has brought his food and his bed with him in preparation for such an emergency. Take, for instance, the case of Krishnaswamy, a toddy-tapper, living in the outskirts of Saidapet. An invitation to a wedding at Podanur brings him from his thatched home, and, with his wife, a variety of children, and a useful assortment of household goods, including brass cooking vessels, he provides a useful load for the bullock cart, or *jutka*, which deposits him at the Central Station. He probably discovers that he has arrived exactly twenty minutes after the departure of his train. That is only a minor point; a wait of twenty-four hours is nothing to him. With his wife, his children, and his cooking pots, he pushes his way through the crowd of would-be or belated passengers, sweetmeat vendors, and coffee vendors, until he finds a vacant site by the wall, where he pitches camp. Food is produced and solemnly eaten (Krishnaswamy, by the way, is not caste-bound, and the eating of food in public is not, to him, an undignified proceeding), cloths are spread on the concrete platform, and within a few minutes Krishnaswamy and his family are asleep. The terrible din which only an Indian crowd can produce, nor the piercing screams of panting engines, disturbs them not at all; they laid down with the intention of sleeping, and sleep they will. So Krishnaswamy eats, sleeps, and (apparently) contemplates the infinite throughout the following day. He is content; he has no cause for worry. Has not the *burra sahib* with the shiny cap told him that there will be a train two hours after sundown? The

burra sahib has said so, and it will be so. When his train does arrive, Krishnaswamy, with his wife, his children, and his cooking pots, enters a third-class carriage, and his troubles, for the time being, at least, are over.

The scene on the platform is kaleidoscopic. Coolies, naked except for a loin cloth, their bodies glistening with perspiration, stagger past with huge trunks, the many hued *sarees*—yellow, green and blue—of Indian ladies, flash under the blazing lights and stand out brilliantly against the white or red *dhoties* (skirts) of the men; garlands lavishly bestowed on a departing *dorai* providing an overpowering smell of jasmine; the piercing cries of a coffee vendor, with his nasal cry of "cawfee—cawfee," rises above the babel which fills the air; the ringing of a bell, the penetrating hiss of escaping steam, the scream of an engine whistle; and, amid the slamming of doors and the roar of voices raised in farewell, the train steams slowly from the station.

The passenger train holds no discomforts for the Indian. It is an innovation of the European which he has approved and adopted. Familiarity breeds contempt, and it is difficult to make the average uneducated Madrassi realise that by keeping open the carriage door and sitting on the floor with his legs dangling outside, he incurs a very grave risk. Similarly all the warnings in the world will not prevent him from jumping out of the train while it is yet in motion, nor, if he is not a passenger, from attempting to cross the line when a train is approaching. While many make the attempt, some succeed, but the horrible lessons which are taught practically every day seem to have no effect.



[Photo: Klein and Peyerl.]

VELLURE JUTKA, MADRAS.

Another point which characterises travel on suburban lines in Madras is the misuse of the communication cord. This is particularly so on one section of the line and by college students—a section of the Indian community which ought to know better. It has been the practice for one of the students, previously deputed for the purpose, to pull the communication cord when the train is near their college, which is some distance away from the nearest station. When the train stops the students make a hurried exit. It is an unfortunate coincidence that the train

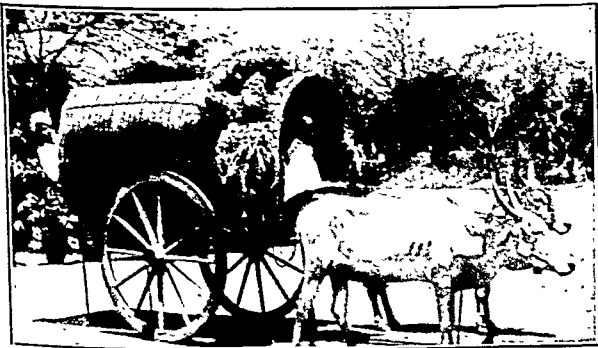
invariably stops on a level crossing over a busy road, and the traffic is held up for a considerable time while the irate authorities unsuccessfully attempt to find the culprit. Strong police action has been necessary to prevent this gross abuse of a valuable invention.

Travelling in South India, it will be seen, is in entirely different circumstances from travel at Home; but if it is less comfortable and speedy, it is certainly a great deal more interesting.

People's Park and Moore Market.

Crossing the bridge over Cochrane's Canal (once known as the North River) the road leads to the People's Park, for the existence of which the public of Madras owes its gratitude to Sir Charles Trevelyan, an ex-Governor. Almost at the entrance is the Moore Market, a bazaar administered by the Corporation of Madras.

The chameleon as a pet would appeal to very few people, yet optimistic dealers in these unattractive creatures abound in the Moore Market—a comparatively modern institution which replaces the odoriferous and insanitary bazaar on Poonamallee Road. If the preference is for a monkey, a parrot, or a chattering bird, there is a wide and varied choice in that section of the bazaar devoted to the sale of livestock. Parrots which appear to possess a most amiable disposition, when handled by the dealer, develop ungovernable tempers within a few hours of the cash transaction, and are likely to remove a square inch of skin from their new owners within a few hours of the transfer! Still, the opportunity to acquire a brilliantly plumed parrot, complete with wire cage, for a sum of about eightpence, does not arise in every country in the world.



[Photo: Higginbothams, Ltd.]

BULLOCK CART, MADRAS.

No matter in what direction the mind of a potential customer turns in the Moore Market, his requirements can be supplied. At some of the stalls tended by venerable old men one wonders whence they obtained their miscellaneous assortment and how they propose to dispose of it. Empty tins, nails, pieces of a broken coffee grinder, a heliograph, a tattered shirt, three empty cartridge cases, a mysterious brass instrument which might be anything from a portion of a theodolite to an infernal machine, a silk hat in the last stage of decrepitude, three battered golf

balls, a china soap dish, a bicycle bell and a Ford hub cap—things like these will often comprise the stock in trade of one of the hopeful vendors.

At the same time, it is possible to obtain some extraordinary bargains in the Moore Market, but not without that haggling which is inseparable from a financial transaction in the East. This is particularly the case at the book stalls, where it is often possible to pick up rare old first editions for a few annas. There is, of course,



[Photo: Klein and Peyerl.]

SNAKE WORSHIP, MADRAS.

the indispensable "Thieves' Bazaar," where the stock consists, practically without exception, of stolen property!

Occupying the southern portion of the People's Park are the Ripon Buildings, opened in 1913, the official home of the Corporation of Madras and the place where the City Fathers conduct their deliberations.

Behind these chief buildings are laid out ornamental grounds which include a large lake, and a Zoo containing an interesting collection of indigenous animals. The South Indian Athletic Association, which has done much to foster a love of sport in the Indian, has its grounds and fine sports ground in the People's Park.

To the west of the Park is Sydenham's Road and to the north the Salt Cotaurs Goods Station of the M. and S.M. Railway. In connection with the latter it may be mentioned that recently, with the object of facilitating the handling of goods at night, the company installed high power electric lights which can be seen from all part of Madras.

The south side of the Poonamallee Road is occupied by the Sir Savalai Ramaswami Mudaliar's Choultry and the Park Station of the South Indian Railway. To the west, and occupying the road which connects with the island, is the Madras Penitentiary. Westwards, the road leads into Periamet, which is principally occupied by Mahomedans engaged in the hides and skins trade.

Vepery.

Naval Hospital Road, near which are the buildings occupied by the Madras Medical Stores, the Government Veterinary Hospital and the Doveton Protestant College, leads into Vepery, the principal residential quarter of Anglo-Indians in Madras. Vepery is another portion of Madras which

came into the possession of the English as the result of a grant from a Muslim, who transferred it in 1642. About 100 years later it was the scene of a sharp and bloody engagement between the English and French. The Society for the Propagation of Knowledge, now known as the Diocesan Press, which has a printing press in the district, commenced its educational activities in Madras in 1717, and a school maintained by the Society for the Propagation of the Gospel is also there.

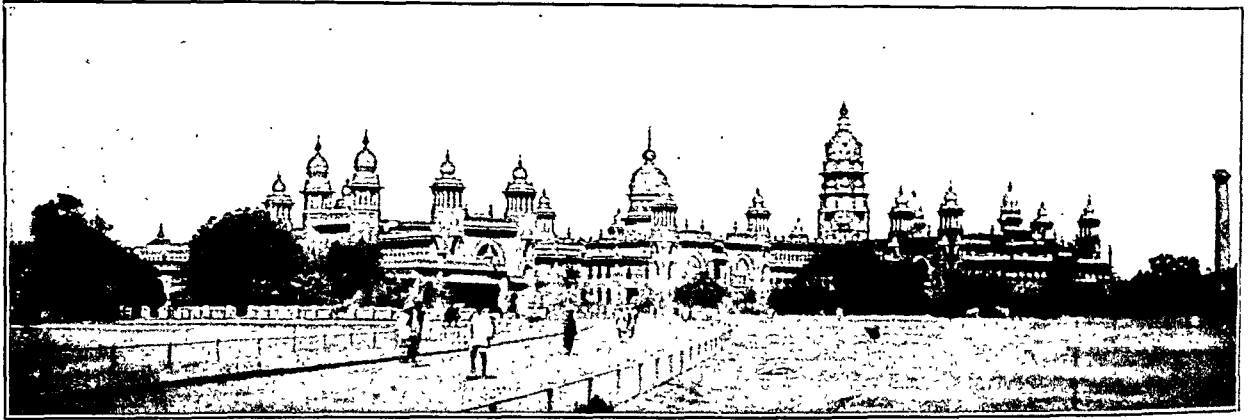
The site of St. Mathias' Church is a piece of ground with an interesting history. Petrus Usan, designer of the Marmalong Bridge, on the Madras-Chingleput road, built a chapel there at his own cost. Later, the jealous East India Company handed it over to the Danish Mission with a view to its being used to counteract the influence of Catholics in Madras.

On the south side of Poonamallee Road is the Madras School of Arts and Crafts, which was established about 1850. Farther west is the fine

of the road which passes from Mount Road to Wallajah Bridge, near the public gate to the fort, is a fine statue erected by public subscription, to the memory of Sir Thomas Munro. He ruled the destinies of Madras as Governor for seven years, and at the end of that period he was struck down by cholera while on a visit to Gooty. Just off the island and fronting the entrance to Government House is a statue of King Edward the Seventh.

Madras Bungalows.

Madras has one advantage which can be claimed by no other city of India—its cool and spacious bungalows. Only those who have experienced the crowded, airless flats of Calcutta and Bombay can appreciate the open, breezy bungalows, with wide verandahs, overlooking fine compounds, which are found in their hundreds in Madras. A typical Madras bungalow consists of drawing room, dining room, lounge, and eight or nine bedrooms, each with its own bathroom. There are wide, airy verandahs both upstairs and



[Photo: Willie Burke.]

MADRAS HIGH COURT.

Church of St. Andrew's or, as it is more popularly known in Madras, the Scotch Kirk. On the opposite side of the road are the buildings which provide headquarters for the Madras Guards, the oldest volunteer corps in India, formed during the time of the Indian Mutiny. The Madras Electric Tramway Co. has its terminus and power station practically next door, and near at hand is the Young Women's Christian Association, which provides a home and recreational and educational facilities for girls working or studying in Madras, as well as temporary quarters for ladies passing through the city. Poonamallee Road leads past the headquarters of the Church Missionary Society out of municipal limits to the old military station of Poonamallee; leaving Kilpauk, another European and Anglo-Indian residential quarter, on the right.

The island, to which passing reference has been made, lies between Government House and the fort. The principal erection on the island is the Gymkhana Club, which offers facilities for golf, soccer, and rugger, among other open-air games, to its members. Occupying a site in the middle

down, and the house throughout is equipped with electric lights and fans. There is always a large compound, complete with tennis courts, possibly several stately palm trees, and practically always beds of tropical flowers, a riot of colour, which are tended daily by the *mali*, or gardener. The kitchen is usually a separate establishment somewhere in the rear of the bungalow. This is an admirable arrangement, for the heat and smell inseparable from cooking quickly becomes evident on a hot, airless day. The Indian cook, a sly rogue who can perform wonders with a handful of hot ashes and an empty kerosine oil tin, is a constant source of worry to the *memsahib*. His cooking may be perfect, but he regards commission on all his purchases for the household as an inherent right, and much wordy warfare arises when the "bazaar" stuff is brought for inspection. With a tiny *chokera* carrying a basket filled with vegetables, fruit and eggs, with perhaps two live pigeons and a struggling hen topping the heap, he comes before the *memsahib* in the morning, and producing a well-thumbed, greasy note-book filled with weird and wonderful markings which

only he can understand, he reels off his current day's prices. The watchful *memsahib*, however, generally succeeds in catching him napping, and the cook retires apparently discomfited but usually content with the knowledge that he has pocketed a few pies commission without the *memsahib*'s knowledge.

Life in the East without a sense of humour would be unbearable and, in this respect at least, a Madras bungalow has its privileges as well as its trials.

Although Madras has been and is often described as a thoroughly unhealthy city, this statement has but little foundation in fact. The weather has been described as "three months hot and nine months hotter," and not without justification. It is no unusual thing for the mercury to climb up to 110° during the hot season, but with plenty of exercise and ordinary care the European has little to worry about. The Corporation maintains an efficient water supply from the huge catchment area and storage tanks at Red

extraordinary progress in the provision and maintenance of schools has been made. At the beginning of the financial year ending September, 1926, there were in existence 51 Corporation schools. The Committee in charge made considerable progress in the official adoption of privately managed schools, and by the end of the year the number had risen to 78. In the Indian household the daughter always occupies a comparatively minor place, and it is the son who is given the best of everything. This being so, it has always been a great difficulty to make the Indian parents understand that girls are as much entitled to a sound education as boys, but it is only necessary at the present day to observe the number of women, some of who have taken their final degrees in England, occupying responsible positions in the medical profession or in Government service, to realise that an appreciable step has been taken in the direction of removing age-old prejudices. While this is the case, schools for girls are still greatly in the minority. At the end of 1926 (the



[Photo: A. Ratna and Co.]

CHINA BAZAAR ROAD, MADRAS.

Hills; and although up-to-date sanitation is a very rare exception, the health of the city is by no means so bad as some people say.

To those who intimately know and love the old city—and their name is legion—Madras is always the first and never the third city of the Indian Empire.

Education.

Reference has been made to many of the higher educational institutions in Madras, but equally, if not more important, are those schools which tend to mental development of the young Indian. Since the introduction of free and compulsory education in the city, the future prospects of hundreds of young children have improved considerably; grants from Government, provisions from municipal funds, and last, but by no means least, privately managed and financed schools have combined to make the City of Madras one of the principal educational centres of the country.

The care of elementary education in the city is in the hands of a small Standing Committee of the Corporation, and during the past few years

most recent figures available), of the 78 Corporation schools there were 16 for girls.

Government's approval of the Corporation proposal to introduce free and compulsory education in certain important wards of the city, announced in the middle of 1925, resulted in considerable increases in the number of children, particularly those of the non-Mahomedan community, attending recognised schools. A notable feature of the Corporation educational activities is that the municipal schools are free and open to all castes and communities, and it says much for the propaganda work carried out by councillors, teachers, and their assistants that the results in a caste-bound country have been so eminently satisfactory.

One factor of incalculable value is that in these schools education is imparted both in English and the vernaculars. By this process the child obtains a firm grasp of the intricacies of a language current everywhere, a particularly useful asset in a country like India, where hundreds of languages and dialects are spoken. As in other parts of the world, the question of vocational

training in elementary schools has been the subject of a great deal of discussion. The Corporation Committee in charge of education has rightly come to the conclusion that vocational training is an all important factor. The percentage of unemployed in India is high, particularly among those who have taken University degrees. An Indian graduate of an Indian University is averse to adopting any type of work which might be classed as menial, and efforts to get educated men to return to their simple village life have not met with the success they deserve. Consequently, there are many unemployed graduates, and a large number who scrape a poor living as vakils of the Madras High Court.

The idea underlying the imparting of vocational training is, therefore, a sound one, and the Corporation has made, or is making, arrangements to give instruction at certain schools in printing,

The Harbour.

While Calcutta and Bombay were making good use of their port facilities for the development of their trade, Madras was greatly handicapped by reason of the fact that it was practically an open roadstead until about the beginning of the present century. For the transport of cargo between ship and shore masters of trading ships were compelled to avail themselves of the native-made *masulah*, or surf boat, which may be described as consisting of planks roughly sawn from trees and laced together with strong twine, and without ribs or keel; but this flexible method of construction has the advantage that boats so built are able to carry their two or three tons of cargo over the boiling surf which threatens, but rarely accomplishes, their destruction. They were, and where still in use, as at Pondicherry, are manned by a crew of six



[Photo: Klein and Peyerl.]

MOUNT ROAD BETWEEN ANJUMAN AND ROUND TANNA, MADRAS.

weaving, mat-making, higher carpentry, rope-making, etc.

While the Madras elementary schools make ample provision for mental development, the importance of the physical side of school life is not neglected. Playgrounds have been or are in process of being provided, and another innovation is the introduction of inter-school sports annually. Scout troops have been formed at certain schools, and, with a view to enlarging the general knowledge of the pupils, excursions to various places of interest, where learning can be imparted under the most suitable conditions, are arranged periodically. Local school children, too, owe much to philanthropic Indians, both Hindu and Muslim, who provide treats on special occasions.

From this necessarily brief outline it will be seen that general elementary education, offered in such a form that it may be taken advantage of by the very poorest people, is one of the most important features of the civic administration of Madras.

or eight men and boys, who navigate them with rude kinds of paddles.

Such was the state of affairs which had been in existence at Madras from time immemorial until the early sixties, when a screw pile pier was constructed. It was 42 feet in width, and 17 feet and 12 feet above low and high-water level respectively, and as it projected for a distance of 1,100 feet there was a possibility of landing goods in tolerably fine weather, although during the greater part of the year the work was most precarious.

The Madras Chamber of Commerce gave careful consideration to the question of providing an artificial harbour, and the Committee which was formed in that connection started investigations and activities which, together with those of the Port Trust in later years, have resulted in the present harbour—the outcome of a prolonged struggle with the forces of Nature at a cost of more than a million pounds sterling.

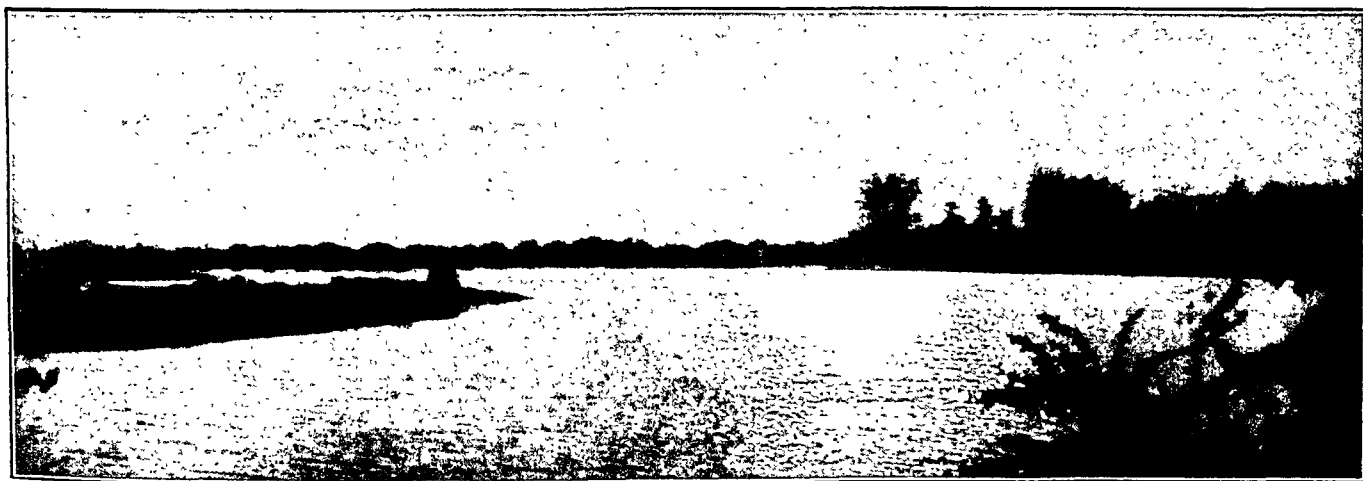
The enclosed artificial harbour of Madras has an area of 200 acres, containing water at all seasons and under every climatic condition. Small craft, ranging downwards from 1,000 tons, are catered for by a nine-acre boat basin which affords safe anchorage at all times. This boat-basin is equipped with 1,600 feet of shallow quay wallings, alongside of which barges and canoe boats can lie. At present, it is principally used for the landing and shipping of iron and stone, as well as for non-dutiable coasting cargo. For the handling of these products, 17 hydraulic cranes are in use.

From this boat basin, a canal leads into a two-acre timber pond, which is equipped with small jetties and cranes and all other facilities necessary for the expeditious handling of timber, for which there is around the pond a commodious storage area. The Madras Port Trust owns some 17 vessels of 1,000 tons and less, and these are accommodated in the boat basin which, in addition,

from, paddocks, thus obviating the necessity for the intervention of railway wagons.

One of the most important features of the harbour is the West Quay, which provides comfortable berthing for four vessels of from 26 to 30 feet draught. Should emergency arise, six vessels can be accommodated. Behind these berths are four transit sheds comprising an area of about seven acres. For working cargo in and out of lighters, between the ship berths spaces are reserved and equipped with 31-ton hydraulic cranes. For the purpose of working cargo in and out of the holds of ships lying at the quay large portable cranes are provided, while there are electric trucks and stackers for the speedy transport of cargo into the sheds.

There are three other ship-quays, namely, the Outer-Quay, used chiefly for the discharge of case oil and petrol on the north-eastern sheltering breakwater; the East Quay, used for coal, at the



SUNSET ON THE COOUM RIVER, MADRAS.

[Photo: A. Ratna and Co.]

provides shelter for anything from 40 to 100-ton lighters, which may be necessary to fulfil the requirements of the landing and shipping business. The boat basin contains also a slipway able to accommodate vessels up to 900 tons dead-weight and an area has been reserved, with a ramp leading up to it, on which smaller boats and barges may be built or repairs carried out. Close at hand are the Port Trust's recently erected and thoroughly up-to-date workshops. Although intended primarily for the purpose of carrying out repairs to the Port Trust's own extensive plant, these workshops can, and frequently do, render assistance to shipping.

Facilities for the handling of petrol and oil are more than adequate, and piping is laid down through which petrol and oil can be pumped to the importing companies' own storage installations direct from vessels lying at their moorings. Equally convenient are the arrangements for the landing or embarkation of horses and cattle, which can walk straight ashore into, or embark

old, now closed, harbour entrance; and the South Quay, used chiefly by Rangoon and Singapore passenger vessels, as well as by horse and cattle boats. All these three quays, as well as the West Quay berths, are connected up by rail, on both the metre and the standard gauge, with all parts of the harbour and indeed of India. Everywhere troops and passengers can pass from rail to ship's side in half-a-dozen paces.

Suitable accommodation for passengers of all classes has been provided at the South Quay, at a cost of about Rs. 200,000.

Madras harbour is excellently situated as regards railway communication with the interior. The systems of the Madras and Southern Mahratta and of the South Indian Railways converge at the port, and further the majority of the large firms have their premises close to both railway trucks and wharves. Wagons belonging to each of the railway companies run over all the lines within the harbour area, and goods can be booked to any station in India from one or other of the two railway offices within the yard.

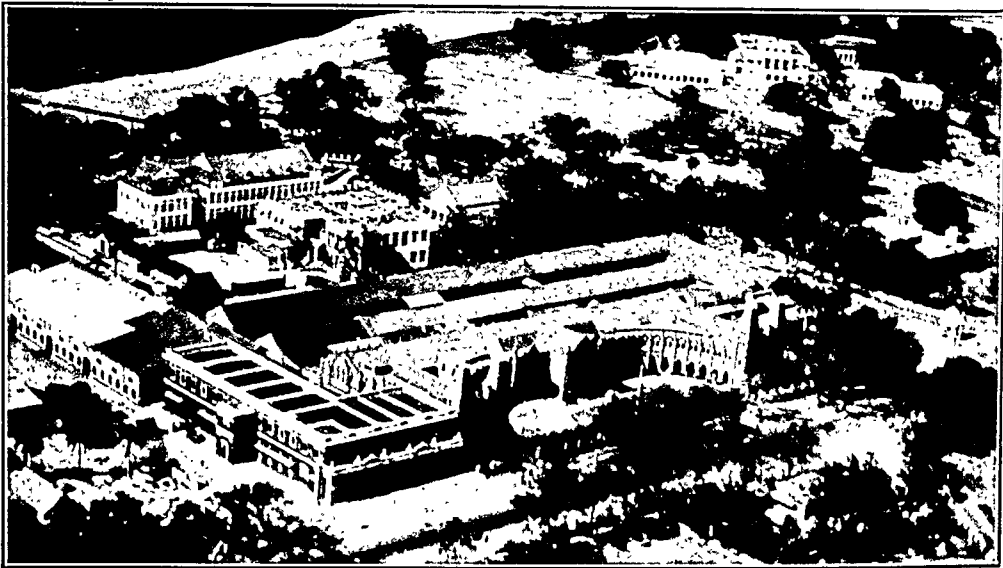
COMMERCIAL MADRAS.

SPENCER and CO., LTD., Wholesale and Retail General Merchants, Cigar Manufacturers, Refreshment Contractors, etc., Mount Road.

THE ornate and impressive front of the premises of Messrs. Spencer and Co., Ltd., in Madras approximates more to that of an extensive Government building or college rather than a general departmental store. The land occupied is several acres in extent, and the fact that the firm employ about 2,000 persons is an eloquent indication of the development which their business has attained. The premises comprise many sections, and the interior of the main portion forming the general department store extends in an

The firm's household equipments are well calculated to meet the most diverse requirements. They have elsewhere in the city a factory where about 200 persons are employed in the manufacture of all kinds of furniture, and these productions are displayed in the firm's furnishing department and auction rooms at 200, Mount Road.

Their pharmaceutical department, elegantly appointed and stocked with a greater variety of drugs, chemicals, patent medicines, toilet acces-



AERIAL VIEW OF THE PREMISES OF SPENCER and CO., LTD., MADRAS.

unbroken sequence of departments without obstructions or pillars for about 400 feet. Progress from end to end of that notable exhibition brings into view most if not all of the things pertaining to life's daily routine.

The departments are so many and equally commendable that it is difficult to determine in which direction the firm excel. To ladies none are naturally more appealing, perhaps, than those where the vagaries of fashion and fancy are alluringly displayed in feminine habiliments of every description. Those for gentlemen's outfitting are similarly authoritative and attractive; and in the tailoring sections are employed sartorial experts whose clever exemplification of fit and fashion in garments for all occasions is a matter of more than local renown.

An example of the thoroughness and completeness with which the firm operate is afforded by the fact that not only are they very large importers of boots and shoes, but they also manufacture them.

sories, etc., than usually obtains in pharmacies in Great Britain, would be a very noteworthy business by itself. The making up of doctors' prescriptions there is under the personal charge of a qualified English pharmacist, and the utmost care is devoted to the freshness and purity as well as the accuracy of all the ingredients compounded.

As grocers and provision merchants Messrs. Spencer and Co.'s stocks of preserved foods of every description bear witness to the wonderful perfection and variety which have been attained in the manufacture of such commodities.

But of all the many departments none is more impressive than the one where the firm's wines and spirits are blended, bottled, and stored. The interior of that uncommon place presents an unbroken vista of about 600 feet long and about 50 feet wide. Both sides are lined with bins holding an enormous range of liquors of every description, including many rich and rare wines in bottles hoary with the dust of time. Messrs. Spencer and Co., Ltd., have their own proprietary

whiskies, "Highland Malt," "Club No. 1," and "Imperial Highland," which are blends of high excellence, and in popular demand.

Very impressive, too, are the departments where the goods ordered by customers in town and country undergo an elaborate system of checking before being carefully packed in wooden cases for despatch by the firm's large fleet of motor vehicles.

No branch of the great business of Messrs. Spencer and Co., Ltd., is more worthy of attention than their aerated water factory, which has a floor space of 15,375 square feet, and an average output of between 3,000 and 4,000 dozen bottles of aerated waters daily. About 45,000 empty bottles are on an average kept in readiness for the demands of the business. But in the production of aerated waters, especially in a tropical city like Madras, it is not the extent but the methods of manufacture that are of primary importance to the consumer. In that connection the factory of Messrs. Spencer and Co., Ltd., is unsurpassed anywhere for scientific procedure and care. The purification of the water supply is conducted by the most thorough and effective methods, and at the time of writing the firm are making experiments for the enhancement of these by ultra-violet rays. The water is first filtered

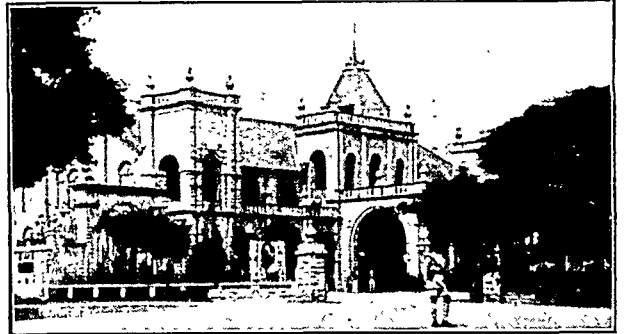


MAIN SHOWROOM IN PREMISES OF
SPENCER and CO., LTD., MADRAS.

in large tanks by passing through four feet of sand beds supported on aluminium sheets with very minute apertures six inches above a basis of granite slabs. It is estimated that these sand filters eliminate 90 per cent. of whatever germs may be in the water, which, conveyed in pipes of blocked tin, next passes a very remarkable purifying apparatus consisting of a long row of porous keiselguhr candle filters made of overlapping microscopic shells so infinitesimal that there are 2,500,000 of them to the square inch. The water is pressed through these candles at a pressure of 35 lbs. to the square inch, and the apparatus is without duplicate in the world, for it was invented by the manager of the factory, Mr. W. Pennington.

Messrs. Spencer and Co., Ltd., manufacture their own flavouring essences and syrups. In all the interesting operations relating thereto scrupul-

ous care is also exercised in preventing any possibility of contamination. The materials are only made when and as required, thus ensuring their absolute freshness and purity, and when ready for the bottling operations, they are as pure as human ability can make them. When their final perfection has been attained they are conveyed by gravitation (for they are manufactured on an upper floor) through pipes of blocked tin into glass-covered filling appliances, which very in-



SECUNDERABAD BRANCH OF
SPENCER and CO., LTD.

geniously and automatically insert the exact quantity necessary into each of the bottles. The latter are then filled by the bottling machinery with the purified water and carbonic acid gas, and immediately afterwards are hermetically sealed by the wonderful crown-corking machine.

Before being used the bottles are thoroughly washed and sterilised. This is effected first in ordinary water, and their insides are scoured by rapidly-revolving brush machinery. Thereafter they are immersed in strong solutions of permanganate of potash and chlorine, and their insides are finally rinsed by jets of purified water at a pressure of 60 lbs. each, this being effected quite close to the bottling machinery, into which the bottles are immediately placed, so as to prevent any possible contamination from the atmosphere.

Samples of the soda waters of Messrs. Spencer and Co., Ltd., were sent for bacteriological examination to Dr. S. Judd Lewis, D.Sc., F.I.C., Ph.C., Lecturer on Spectroscopy at University College, London, and the following are extracts from his report:

"Volume of carbon dioxide: 2,427 C.C. per bottle, or 5.95 times the volume of water contained in the soda-water."

"BACTERIOLOGICAL EXAMINATION OF SPENCER'S SODAWATERS.

Bile-salt Glucose: No acid or gas generated in 100 C.C. of water. Bile-salt Lactose: No gas generated in 100 C.C. of water. The general observations on the sodawaters are that the waters are of a high degree of bacterial purity and are pure and wholesome."

"CHEMICAL EXAMINATION OF SPENCER'S SODAWATERS.

In response to the inquiry as to whether any poisonous metals are present, it should be stated that the proportion of lead is so minute as to be quite negligible. It was found spectroscopically, but it is, practically speaking, too small to be found by the usual chemical tests."

"SUSPENDED MATTER IN SPENCER'S SODAWATERS.

This was insignificant in quantity and apparently in quality also. In no case was there any non-volatile suspended matter."

The beverages made by Messrs. Spencer and Co., Ltd., are in large variety, and it is worthy of note that in the production of their delicious Orange, Lemon, and Lime Crushes they use a substance giving the same beneficial results as Vitamine C.



**BANGALORE BRANCH OF
SPENCER and CO., LTD.**

The firm are refreshment contractors to the Madras and Southern Mahratta Railway, the South Indian Railway, North Western Railway, and the Mysore State Railway. They have wholesale branches at Bombay and Karachi, and retail branches at Alleppey, Bangalore, Calicut, Champion Reefs, Cocanada, Cochin, Coimbatore, Kodaikanal, Kotagiri, Madura, Mercara, Ootacamund, Pollibetta, Quilon, Secunderabad, Trivandrum, Trichinopoly, and Waltair, as well as in Georgetown and Vepery, Madras.

Messrs. Spencer and Co., Ltd., are also owners of the two chief hotels in Madras, the Connemara

and the Hotel Spencer. Each of these establishments is very comfortably appointed, and electric fans and lights are in all the bedrooms as well as in the public sections. The cuisine of both is exceptionally good, which is not surprising in view of the great resources and experience of the firm as the leading caterers in India. Other hotels belonging to Messrs. Spencer and Co., Ltd., are the West End Hotel and Cubbon Hotel, Bangalore, and the Hotel Antigo Palacio, Mormugoa, which are also worthy of every commendation.

The business was started in 1863 by Mr. Charles Durrant, who was joined in partnership two years later by Mr. J. W. Spencer under the name of Durrant and Spencer, which was changed in 1873 to Spencer and Co. After many changes in its personnel the firm was formed in 1897 into a limited liability company, which has now a capital of 65 lakhs of rupees.

In 1926 the business of Oakes and Co., Ltd., in which Messrs. Spencer and Co., Ltd., had become the principal shareholder, was liquidated. The motor-car section of Oakes and Co., Ltd., was continued by a new company of the same name, with a capital of six lakhs, and all the other assets were transferred to Messrs. Spencer and Co., Ltd. The net result was the acquisition by Messrs. Spencer and Co., Ltd., of the valuable site, 199 and 200, Mount Road, at a figure represented by the surrender of shares which cost very much less than the value of the land and buildings acquired in their stead. The extensive Oakes garage is the local depôt for the Ford cars and accessories.

The cable address of Messrs. Spencer and Co., Ltd., is "Torpedos," Madras, and the codes used by them are the A B C 5th edition and Bentley's.

**OAKES and CO., LTD., Motor Engineers, Importers of the Ford Vehicles;
Insurance, Clearing and Forwarding Agents, 200, Mount Road.**

MANY changes have taken place during recent years in the commercial firms in Madras, especially those in Mount Road. One of the most noteworthy examples in that connection is presented by the business of Messrs. Oakes and Co., Ltd., which had been established in 1843, and comprised one of the largest of the local department stores. In 1926 that business was taken over by Messrs. Spencer and Co., Ltd., who now utilise for furniture and other requirements the main portion of the premises formerly occupied by Messrs. Oakes and Co., Ltd. The motor department of the latter, however, was continued under a new company, and is the sole depôt in Southern India and the Nizam's Dominions for the celebrated Ford cars and trucks. It occupies an area of about two acres, and gives employment to about 250 workmen.

There are more Ford cars about the world than any other makes. They are to be numbered by the million; and their popularity continues unabatedly because of the great improvements which have been made in them during recent years, not so much with regard to the engine, which has reached a perfection which seems impossible of enhancement, but in the new grace, charm, greater comfort, and convenience of the body.

Messrs. Oakes and Co.'s chief workshop measures 200 by 90 feet, and has an excellent equipment of machinery, including a travelling crane capable of carrying weights up to three tons. The company build for the Ford chassis all kinds of lorries, busses, etc., and their painting is done by the new electric spraying process that has relegated hand-painting to the limbo of the obsolete.

The ownership of a Ford carries naturally more advantages in regard to spare parts and accessories than any other car in the world, and the great stock of these held by Messrs. Oakes and Co., Ltd., is certainly very impressive. That extensive assortment is upheld by the fact that there are more Ford vehicles in Madras and throughout India than any other makes, and the rapidity with which their number is being augmented will be appreciated by the fact that Messrs. Oakes and Co., Ltd., receive shipments of about 100 of them at a time, and sell about 50 of them monthly.

Messrs. Oakes and Co., Ltd., are also clearing and forwarding agents, and are agents for:

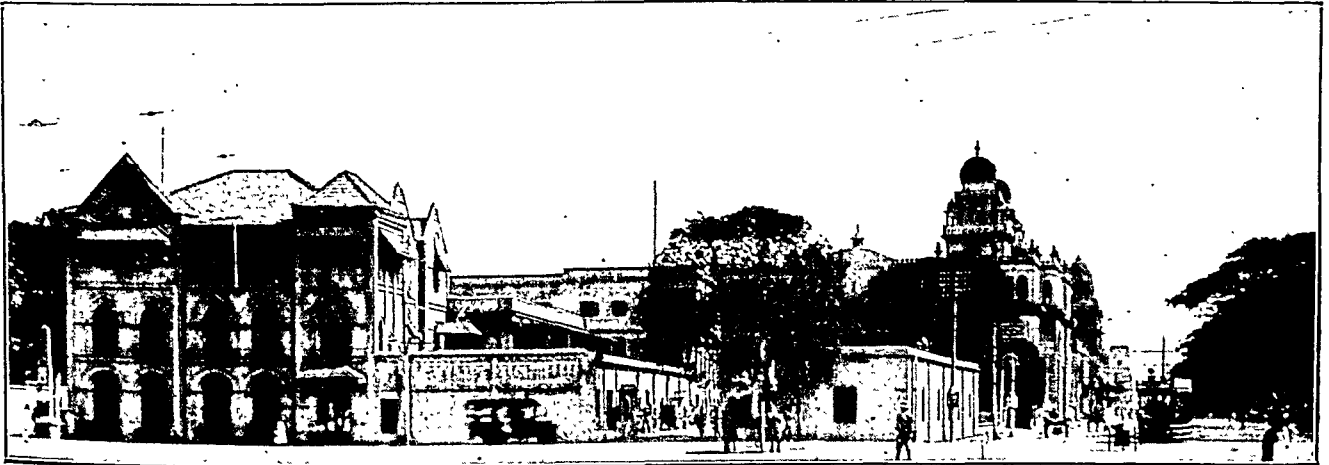
Royal Insurance Co., Ltd.
Commercial Union Assurance Co.
Neale & Wilkinson, Ltd.
Geo. Wheatley and Co., Ltd.
Pickfords, Ltd.
American Express Co., Ltd.
Gerhard & Hay, Ltd.
Lep Transport & Depository, Ltd.
Pitt & Scott, Ltd.
Northern Transport Agency.

The telegraphic and cable address of Messrs. Oakes and Co., Ltd., is "Oakes," Madras, and the codes used by them are the A B C 5th edition, Bentley's, Lieber's, and Western Union.

PARRY and CO., Merchants, Bankers, and Agents, First Line Beach.

THERE are in Madras several fine old firms with records and traditions going back many decades; but none of them is more worthy of notice in that respect than Messrs. Parry and Co., whose extensive premises are admirably situated close to the

were eventful times. The defeat of the French and the weaker position of the native princes by the loss of their alliance placed power in the hands of British officials at Madras, which was indiscreetly used by some, who, after the manner



"PARRY'S CORNER," FORMED BY THE PREMISES OF PARRY and CO., MADRAS.
(Probably the oldest business site in India).

principal banks, the General Post Office, and opposite to the Beach Railway Station, which is the junction of the South Indian Railway with the Madras and Southern Mahratta Railway Company. That valuable site is referred to in ancient histories of Southern India as "Parry's Corner," which was purchased in 1775 for ten thousand "star pagodas." Title deeds in possession of Messrs. Parry and Co. show that the property was transferred in 1803 to the founder of their business, Mr. Thomas Parry, who was born at Leighton Hall, Welshpool, in 1768, and went to Madras at the age of twenty. Shortly after his arrival in 1788 he started business as a merchant; but accepted a post under the official Accountant of Madras, and remained in association with the authorities for about four years, being at one time private secretary to General Medows, the Governor of Madras, from 1790 to 1792, when he resigned in order to devote his entire time to his commercial affairs. Those

of the Anglo-Indians of that date, had private interests and sordid ends to serve, to the oppression of the inhabitants.

A determination to preserve the right and defend the plundered natives was the patriotic endeavour of Mr. Parry. But his active interest in the affairs of the native princes rendered him obnoxious to the authorities at the fort; and his banishment was decreed. Leaving Madras in the company of Mr. Orme, the celebrated historian, or a relative of his, he went to Ceylon, and stayed there with the Governor of that colony until the excitement over his departure had subsided in Madras. He then returned, probably about 1818, and again became very influential amongst the Indians. In 1824 he and a nephew of his, aged only ten, while travelling between Porto Novo and Cuddalore, died through cholera on August 24th of that year. They were buried in Christ Church, at Old Town, Cuddalore, in the pavement of which edifice there is a stone to their

memory. A tablet to Thomas Parry was also erected in St. George's Cathedral, Madras, and on it is inscribed a lengthy eulogy of his good qualities.

The offices of Messrs. Parry and Co. are probably just as they were when Napoleon was dazzling the world with his military achievements. On the walls of the large private room used by the two present partners, Mr. C. E. Wood (Sheriff of Madras in 1925-1926) and Mr. W. O. Wright, O.B.E., hang pictures of many of the former members of the firm, including a fine old painting of Mr. Thomas Parry, and another of him in company with Admiral Cornish. Amongst the interesting old mementoes in that room are also ancient books containing copies of the firm's letters in beautiful penmanship, for copying ink, carbons, typewriters, and other modern office accessories were then unknown. While largely taken up, of course, with the firm's affairs, the letters in these ancient volumes reflect the historical events of the times in which they were written and the conditions then prevailing in Madras. Many of them are signed by Mr. Thomas Parry, and in remarkably clear and eloquent diction refer to numerous commercial and industrial projects in which he was engaged. The same spirit of enterprise and ability and adherence to the highest standards of rectitude manifested in the firm's activities under the regime of its worthy founder are equally characteristic of the business to-day.

Amongst the large and important interests controlled by Messrs. Parry and Co. is the Presidency Manure Works, Ltd., at Ranipet, where large quantities of bones are crushed by up-to-date machinery, and where chemical fertilizers are prepared. The greater portion of the output of that factory is required to meet an increasing local demand, but a considerable amount is exported. Fertilizers, it may be noted, are used extensively by planters in the districts of Mysore, the Nilgiris, and in the Wynaad district of Malabar. The Government Department of Agriculture has established experimental stations where demonstrations are given of the relative values of different kinds of manures, and the *ryots* have taken a keen interest in the subject since it has been proved to them that heavier crops can be obtained by the judicious use of these aids to a scientific cultivation of the land.

Messrs. Parry and Co. are also managing agents for the East India Distilleries and Sugar Factories, Ltd., whose principal works are at Nellikuppam. Sugar is manufactured there partly from jaggery, which is a product of the palmyrah-tree, and partly from sugar-cane, a considerable quantity of which is grown by the company itself and by the *ryots* living within ten miles or so of the factory. There is also at Nellikuppam a large distillery, said to be the finest in India, in which arrack is manufactured. Another industry in connection with the Nellikuppam distillery is the collection of the carbonic acid gas

generated in the early processes of spirit manufacture. This gas is liquified under great pressure, and packed in steel cylinders for sale to soda-water manufacturers throughout India and Burma. Another department of the remarkable combination of industries at Nellikuppam is devoted to the manufacture of all kinds of sweets, which are growing in popular demand in India, Burma, Ceylon, and the Straits Settlements.

The same company has another sugar factory at Kulasekarapatnam, about 35 miles distant by sea from Tuticorin, or by motor-car from Tinnevely respectively, and sugar is made there from juice and jaggery obtained from palmyrah-trees which abound in the neighbourhood. Messrs. Parry and Co. are likewise managing agents for the Deccan Sugar and Abkari Co., Ltd., whose works are situated about nine miles from Cocanada, adjacent to a line of railway and one of the Godaveri canals, both of which are available for transport. The factories mentioned produce on an average about 2,000 tons of sugar per month.

Other important concerns for which Messrs. Parry and Co. are managing agents are the New Malabar Timber Yards and Saw Mills, Ltd., at Kallai, near Calicut; Parry's Engineering, Ltd., Calcutta, for the manufacture of all kinds of light railway materials; the Government Russelkonda Saw Mills; the Mofussil Warehouses and Trading Co., Ltd.; and The Commonwealth Trust, Ltd., which has nine tile factories and two weaving concerns on the Malabar Coast.

Messrs. Parry and Co. operate very extensively as general merchants and commission agents, and have branches at Badagara, Bangalore, Berhampore, Bezwada, Bombay, Calcutta, Calicut, Cannamora, Chowgat, Coconada, Cochin, Codacal, Cuddalore, Cuddaph, Elore, Erode, Feroke, Guntur, Jeppo, Kallai, Karachi, Karur, Kudroli, Kulasekarapatnam, Kumbakenam, Madura, Mangalore, Masulipatam, Malpe, Nagercoil, Nagapatam, Nellikuppam, Nellore, Nidavole, Olavakode Palghat, Panrutti, Porto Nova, Puthiyara, Ranipet, Russelkonda, Trichinopoly, Tinnevely, Tuticorin, Trivandrum, Quilon, Udipi, and Vizianagaram.

Messrs. Parry and Co.'s agents in London are Messrs. Parry, Murray and Co., 107, Old Broad Street, E.C., and this agency is invariably managed by a retiring partner. Their telegraphic address is "Ubiquitous," and their codes are the A B C 5th edition, Bentley's, and Scott's 10th edition. Messrs. Parry and Co. are agents for an enormous number of famous commercial and industrial firms as well as:

Insurance Office of Australia, Ltd.
 Merchants Marine Insurance Co., Ltd.
 New Zealand Insurance Co., Ltd. (Fire and Marine).
 The North British & Mercantile Insurance Co.
 Ocean, Accident & Guarantee Corporation, Ltd.
 Ocean Marine Insurance Co., Ltd.
 Royal Exchange Assurance Corporation (Fire, Life and Marine).
 Sun Insurance Office, Ltd. (Fire and Marine).
 Natal Direct Line of Steamers.

BEST and CO., LTD., Merchants and Agents, North Beach Road, opposite to Beach Station.

ONE of the firms contributing most to the commerce and industry of Southern India is that of Messrs. Best and Co., Ltd., whose interests are on a very comprehensive scale, and give employment to about 10,000 persons. Their business was founded by Messrs. A. V. D. Best and J. McIntock, who entered into partnership in 1879 under the title of Best and Co., taking over and continuing the connections of Aspinwall and Co., established in Madras during the previous ten years. One of the later partners was Sir Robert Black, Bart. In 1911 the firm was formed into a limited liability company, and the managing director of it is Sir Gordon Fraser, who has been associated with the business since 1895. The other directors are Messrs. W. W. Paul, A. Fraser, W. H. Ruddle, and F. Birley. The Secretary is Mr. E. R. Rose.

Messrs. Best and Co., Ltd., are amongst the largest of the local exporters, and through their commodious warehouses pass great quantities of hides and skins, groundnut kernels and other oil seeds and produce, which are shipped to various parts of the world. The firm's imports consist chiefly of piece-goods and engineering supplies, etc., in which they also occupy a leading position in Madras trade.

Messrs. Best and Co., Ltd., are proprietors of the Cocotine Refinery at Pondicherry, the Eagle Rolling Mills, Kumardhubi, and the Northern Circars Development Co., Cigar Manufacturers, Cocanada. They are managing agents for the Anglo-French Textile Co., Ltd., Crompton Engineering Co. (Madras), Ltd., Madras Tanning and Trading Co., Ltd., and the Mysore Tannery, Ltd. As secretaries for the Singareni Collieries Co., Ltd., they transact a large coaling trade; while as general clearing, forwarding, insurance and commission agents their operations cover all branches of modern commerce. Messrs. Best and Co., Ltd., have branches at Pondicherry and Cocanada, and they have agents at all the principal towns in Southern India. Their telegraphic address is "Best," and they use all the standard codes. They are agents for the following:—

SHIPPING.

Asiatic Steam Navigation Co., Ltd.
Ellerman (Hall & City) Lines.
Ellerman Bucknall Steamship Co., Ltd.
Anchor Line.
Canadian Pacific Steamships, Ltd.
Cunard Line.
Java Bengal Line.
Koninklijke Paketvaart Maatschappij.
Netherland Steam Navigation Co.
Rotterdamsche Lloyd Steamship Co.
Transatlantic S.S. Co., Ltd., Gottenburg.
Societa Veneziana Di Navigazione A Vapore.

CLEARING AND FORWARDING.

Agents for the Kolar Gold Field.

ENGINEERING.

Associated Manufacturers' Co.
Birkmyre Bros.
Broome & Wade, Ltd.
Davey, Paxman & Co., Ltd.
British Ropes, Ltd.
Hongkong Rope Manufacturing Co., Ltd.
Indian Patent Stone Co., Ltd.
Merryweather & Sons, Ltd.
Mysore Iron Works.
Petters, Ltd.
Petters (Ipswich), Ltd.
Shahabad Cement Co., Ltd.

INSURANCE.

Alliance Insurance Co., Ltd.
North British & Mercantile Insurance Co., Ltd.
Northern Assurance Co., Ltd.
South British Insurance Co., Ltd.
Fine Art & General Insurance Co., Ltd.

GOVERNMENT.

Sudan Government Railways and Steamers.
British North Borneo Government.

PAINTS, ETC.

Certainfeed Products Corporation.
International Paint & Compositions, Ltd.
Murarka Paint & Varnish Works, Ltd.

GENERAL.

Asiatic Petroleum Co. (India), Ltd.
Anglo-Saxon Petroleum Co., Ltd.
Nobel's Explosive Co., Ltd.
British Alizarine Co., Ltd.
British Goodrich Rubber Co., Ltd.
Burrakur Coal Co., Ltd.
Hyderabad (Deccan) Co., Ltd.
Price's Candles.
Swiss Milk Co., Ltd.
Lloyds.

**THE GENERAL CONSTRUCTION CO., LTD.,
Architects, Builders, and Contractors, Pantheon Road.**

THE General Construction Co., Ltd., has the distinction of being the only English undertaking of its kind in Madras. It was formed in 1923, and reconstructed in 1926. While operating as architects, builders, and contractors, the company devotes special attention to reinforced concrete, and in that connection has already done a great deal of important work in bridges, foundations, etc. The managing director is Mr. C. Newman-

Sanders and the architect is Mr. H. F. Prynn, A.R.I.B.A. The company is connected with the British Steel Piling Co., Ltd., of 54, Parliament Street, Westminster, London, S.W.1. The telegraphic address of The General Construction Co., Ltd., is "Concrete," Madras, and the codes used are Bentley's and the A B C 5th and 6th editions.

BRUNNER, MOND and CO. (INDIA), LTD. Manufacturers of Chemicals.

This firm have a branch at Madras, and are reviewed on pages 70 and 71.

McDOWELL and CO., LTD., Wine Merchants and Cigar Manufacturers, 2-6, Second Line Beach.

To the average foreigner India is a land of drinks and smokes—a thirsty land, where the evenings especially are greatly welcomed, and dreams and fancies arise in the incense of the Indian cheroot. In the latter connection the name of McDowell and Co., Ltd., is well-known throughout the world, and in the former connection connoisseurs in Madras and Southern India are appreciatively familiar with the Celtic designation of the source of supply of choice wines and spirits and other liquors reminiscent of far-off days and places before the East had sent forth to them its imperious call.

The premises of Messrs. McDowell and Co., Ltd., in Georgetown, give from the outside little indication of the fact that they occupy an area of about two acres. They are an interesting survival of the long distant past, and must be amongst the oldest of the local structures; but have been adapted from time to time to meet the firm's requirements. The present managing director of the company, Mr. F. E. Hooper, is the great-grandson of the founder of the business, a Dr. McDowell, who, after taking his pension from "John" Company, started trading in 1825 as a wine merchant. His venture proved extremely successful, resulting in the acquisition of many valuable agencies, and developed greatly. Messrs. McDowell and Co.'s old godowns are admirably adapted for the storage of their wines and spirits. They do a considerable amount of blending and bottling, and are, of course, direct importers from the best sources of supply in the world.

About 1880 the late Mr. A. M. Hooper, who was then senior partner of the firm, realising the possibilities of the cigar industry in India, began manufacturing operations at Trichinopoly, at that time the centre of the industry in Southern India. The method of curing the indigenous leaf was then exceedingly crude; and the firm recognised the fact that in order to attain a leading position in the cigar trade it would be necessary to obtain higher quality and greater variety of the raw material, and to make use of expert knowledge in the most important work of blending different tobaccos. Mr. Hooper's energy and enterprise

were accordingly directed towards improvement and perfection in every possible direction in his new industry, and as an increased demand was the natural consequence, it became necessary to make arrangements for greater accommodation. The firm's factory in Georgetown was therefore opened, and to start the work there forty "rollers" and their families were sent from Trichinopoly. The number of hands now employed runs into some hundreds.

Up to the year 1897 Indian and Sumatra tobaccos alone had been used in the factory; but as the public taste was setting towards a higher quality, the firm were the pioneers in the introduction and blending of the finest imported leaf with the Indian product. The secret of the distinctive individuality and quality of Messrs. McDowell and Co.'s cigars lies largely in the precision and accuracy with which the various tobaccos are blended in their factory by European experts, who adhere to the formula introduced at the beginning of the present century by an expert brought by the firm for that purpose from Germany. Throughout all the manufacturing processes the utmost care is exercised in preventing anything that might militate against the perfection of the cigars, which have been awarded gold medals and other honours at many Exhibitions, and are held in high esteem by discriminating smokers everywhere.

Messrs. McDowell and Co., Ltd., also operate as general merchants and commission agents, and are agents for C. J. Van Houton and Zoop Weesp, Henry Lund and Co., Christiana; Wood Products; The Howrah Flour Mills, Howrah; The Reform Flour Mills, Ltd., Howrah; Holmes, Wilson and Co., Ltd., Calcutta.

They have a branch at 56, Esplanade Row, Bombay. Their telegraphic address is "McDowell," Madras, and the codes used by them are the A B C 5th and 6th editions, and Bentley's. The firm's London agents are Messrs. L. Dent and Co., Ltd., 24, Martin's Lane, Cannon Street, E.C., who control the sale of the McDowell cigars in the British Isles, and from whom the cigars can, of course, be obtained.

CUTLER, PALMER and CO., Wholesale Wine and Spirit Merchants, Second Line Beach.

CUTLER PALMER! What a name that is throughout the East as a synonym for specialisation in the wine and spirit trade in its most approved and eclectic phases. In that extensive territory, but particularly in India, no firm has had longer or greater fame in everything pertaining to wines and spirits than the celebrated house forming the subject of this brief sketch. It was founded in 1815 by Capt. Frank Cutler of the Royal Navy, who had been captured in a sea fight by the French, and was imprisoned at Bordeaux, whence he escaped, it is said, in a wine barrel. During his imprisonment there he had gained considerable

knowledge of the local wine trade, and on his return to England he utilised that knowledge by starting in trade as a wine merchant, with very gratifying success. His business developed greatly, and in the course of time branches of it were established at Bombay, Madras, and Calcutta, etc. In 1851 the concern assumed its present name, when Mr. C. V. Palmer became a partner in it. That gentleman died in 1880, and was succeeded by his son, Mr. A. C. V. Palmer, who passed away in 1924. The son of the latter, representing the third generation of the Palmer family in the business, Mr. S. A. Palmer, is now

on the staff of the Madras branch, which is under the management of Mr. C. Britten. The present partners in the firm are Mr. F. G. Wallis Whiddett, who has been in the business for about forty years, and Mr. J. H. Witchurch, who has been in it for about sixteen years. Both attend to the firm's interests at their London office at 3-4, New London Street, E.C.

The firm's exceptionally long experience has given to them supreme knowledge of the finest wines in the world. Only the finest vintages are passed by them, and their name on a bottle of claret or Burgundy is an absolute guarantee of quality. The maintenance of quality is the vital principle of their policy.

The influence exerted by the supplies of this historic house on human affairs would make

intensely interesting reading. Its founder was frequently the host of Lord Nelson, who drank and approved his wines, which were also appreciated in later days by Lord Brougham, the Earl of Effingham, the Marquis of Huntley, Bishop Wilberforce, and very many other celebrities. Firmly established in India before Havelock's immortal days at Cawnpore and Lucknow, Messrs. Cutler, Palmer and Co. have enjoyed the patronage of a long line of distinguished men, including many Viceroys, Governors of Provinces, and eminent soldiers.

Branches of the business are established at Bombay, Calcutta, Lahore, Colombo, Singapore, Brisbane, and in Burma, Japan, China, etc., as well as at Madras.

WILSON and CO., Merchants and Agents, 5-8, Jehangir Street.

LIKE those of most of the other large firms of general merchants in Georgetown, the premises of Messrs. Wilson and Co. are reminiscent of long past years when Madras was very different from what it is to-day. When the old structures of Georgetown were erected, the first consideration was utility, and the dark, cool recesses, for instance, where Messrs. Wilson and Co.'s merchandise is stored, including choice assortments of wines and spirits, were and still are admirably adapted for their purpose. When Messrs. Wilson and Co. removed into these premises in 1893 they altered the front to suit their requirements, and its impressive appearance is in keeping with the standing of the firm in local trade. Throughout their numerous departments there is a system of operation minutely *en rapport* with qualities and quantities and the changes in demand and supply and that has been evolved through long and extensive experience of Indian trade. Messrs. Wilson and Co.'s leading imports are piece-goods, sundries, coal, timber, machinery, and building materials of every description. They are exporters of all kinds of Indian products, and their activities as general commission agents will be appreciated by the list of their agencies at the end of this brief sketch. They have been Lloyd's agents since 1875.

The nucleus of Messrs. Wilson and Co.'s business was formed in 1859 under the name of Bainbridge, Byard, Gair and Co., which in 1873 was changed to T. H. Allan and Co., whose offices were in the Bank Buildings, Beach, next to the Georgetown Small Cause Court. In 1875 the present designation of Wilson and Co. was assumed, and after two removals, first to the site of the New Mercantile Bank Building and next to the Oriental Building in Armenian Street,

the business was finally installed in its present quarters in 1893, as already indicated.

Many changes have occurred in the personnel of the firm with the passing of the years. The present partners, resident in Madras, are Mr. Douglas King and Mr. A. D. Charles. The other partners are Mr. Robert Dalgleish, Calcutta, and Mr. Joseph Goodman, London.

Messrs. Wilson and Co.'s cable address is "Wilson," Madras, and the codes used by them are Bentley's, Kendall's, A B C 5th and 6th editions, and private. They are managing agents for Balaytrie and Boyikerry Estates and Wilson's Estates Co., Ltd., and are agents for:—

The Ocean Steamship Co., Ltd.
Société Nazionale di Navigazione, Milan.
Commercial Union Assurance Co., Ltd.
Guardian Assurance Co., Ltd.
London & Lancashire Assurance Co., Ltd.
The Bengal Paper Mills Co., Ltd.
The Bengal Flour Mills Co., Ltd.
The Howrah Oil Mills Co., Ltd.
Central Kurkend & Coal Co., Ltd.
Bokaro & Ramgur, Ltd.
Sarakdhi, Ltd.
Rexine, Ltd.
John Kidd Co., Ltd.
George Mann & Co., Ltd.
The Carbon Cement Co., Ltd.
Coates & Co., Plymouth.
William Gossage & Sons, Ltd.
Macdonald & Muir, Ltd.
Ansar, Harford & Co.
Bryton & Plate, Junior, Ltd. (Chewing Gum).
Hoskins & Sewell, Ltd. (Bedsteads).
Paripan, Ltd.
Fry's Metal Foundry.
J. L. Morrison & Co., Ltd. (Wire-stitching Machines)
Stokes & Co., Cleveland, Ohio, U.S.A.
Buhler Bros., Uzwil, Switzerland.

F. and C. OSLER, LTD., Electrical Engineers and Contractors.

THIS firm, who have a branch at Madras, are reviewed on pages 86 and 201.

SIMPSON and CO., LTD.,

Motor Engineers, Carriage Builders, and Importers of Motor Cars and Accessories, Mount Road.

THE vast changes which have been effected in vehicles during recent years is nowhere more impressively demonstrated than in the works of Messrs. Simpson and Co., Ltd., occupying an area of about three acres in the Chindarapet district



**OFFICE and SHOWROOM BUILDING OF
SIMPSON and CO., LTD.**

of Madras, opposite the Cooum River. The business of this well-known firm was started in 1840, and is the oldest of its kind in the Presidency; but long before that date their premises had been used as livery stables in the days of the stage coaches, when there were no railways, so that there is probably no business premises in the world with longer equine associations than those to which attention is now being directed.

In pre-motor days Messrs. Simpson and Co. were one of the largest and most famous firms of coach-builders in India. One of the catalogues which they used to issue regularly was seen by the present writer, and it was very impressive with its beautiful illustrations of the many kinds of vehicles, all of the firm's own designs, which made them renowned throughout the Orient. Emblazoned in gold on the catalogue was the Royal Coat of Arms of Great Britain as the outcome of the special warrant of appointment of Messrs. Simpson and Co. to His Majesty the King Emperor Edward VII, and supplemented by a list of 32 of the principal rulers in India, whose patronage was enjoyed by the firm together with that of the successive Governors, Commanders in Chief, Chief Justices, and principal officials, civil and military, of the Madras Presidency, etc. In that catalogue, too, were reprints of many Press encomiums regarding the remarkable achievements which the firm had attained in the ordinary course of business as well as at Exhibitions in India and England, where they had been awarded gold medals and other honours for the high quality of their productions. The latter were of very great variety and included magnificent State

coaches resplendent in silver and gold lace and other luxurious fittings designed and upholstered expressly for Royal Durbars and State functions, also Oriental drags, phaetons, victorias, landaus, broughams, mail and passenger busses, buggies, rickshas, etc. Quite a number of these are still kept in readiness in the works to meet the orders that continue for them from all parts of India. The most interesting of them all is a gorgeous Royal State coach, said to have belonged to King Ludwig of Bavaria, which was purchased at an auction sale at Paris.

The completeness of Messrs. Simpson and Co.'s activities as coach-builders was indicated by the fact that they made nearly all the fittings of their carriages, including gold and silver laces, lamps, etc., etc. They were also celebrated as manufacturers of harness and saddlery, billiard tables, etc. All that work began to be discarded in preference for the requirements of the great new motor industry that was rapidly relegating horse drawn vehicles to the limbo of the obsolete. One of the first horseless carriages to be constructed in India was made by Mr. Samuel John Green, one of the present directors, who had joined the business in 1902. Although that first Indian motor car was crude and inefficient, it marked the great new era upon which the firm was entering, and in a few years they had entirely remodelled their premises and equipped them with everything for the perfection of process and result in all branches of motor engineering. Year after year improvements in that connection were made in keeping with the evolution which the motor car was undergoing, and to-day Messrs. Simpson and Co., Ltd., are exemplifying the same skilled workmanship and resource that made them famous in coach-building times.

In 1917 the large and handsome structure which had been specially planned and built for the firm's offices and showroom was completed. Messrs. Simpson and Co., Ltd., are agents for the Chevrolet, Oakland, Pontiac, Daimler cars, and the Federal trucks. A feature of the facilities at their works is a circular track where new cars or those repaired may be tested indefinitely without the necessity of having to leave the premises.

The firm was formed into a limited liability company in 1924. Co-director with Mr. Green already mentioned is Sir Alexander McDougall, who joined the business in 1899, and has taken a very active and prominent part in all matters pertaining to the welfare of the people of Madras. He is a Member of the Legislative Council and late Sheriff of Madras.

The firm's telegraphic address is "Simpson," Madras, and the codes used by them are the A B C 5th edition, Bentley's, and private.

**ASSOCIATED PUBLISHERS (MADRAS), LTD.,
HIGGINBOTHAM'S DEPARTMENT and ASSOCIATED PRINTERS' DEPARTMENT,
Booksellers, Publishers, Stationers, Printers, Bookbinders, etc., Mount Road.**

MADRAS has no pavements, no centralised shopping district with long vistas of window attractions. European shopping in this extremely spacious and widely scattered city is confined practically to the Mount Road region, where "Higginbotham's" admirably meets local requirements for books and kindred supplies, stationery, etc. The story of Higginbotham's goes back to the first half of the nineteenth century. Prior to 1844 Mr. Abel Joshua Higginbotham was the librarian of the local Wesleyan Book Depository, which consisted chiefly of religious works. Eventually, as that library was unprofitable, its stock was sold to Mr. Higginbotham, who, with the volumes thus secured, began business as a bookseller in a small building in Mount Road. Such was the beginning of the well-known Higginbotham business, which is to-day the largest of its kind in Southern India and has its connections throughout the peninsula.

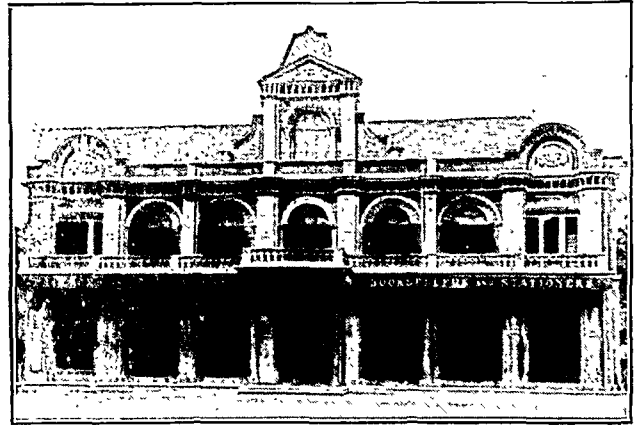
In 1875, when King Edward visited Madras as Prince of Wales, Messrs. Higginbotham and Co. had the unsolicited honour of being appointed booksellers to His Royal Highness, a mark of favour which was not conferred on any other firm of booksellers in India.

Mr. Higginbotham was Sheriff of Madras in 1889 and 1890, and after his death in 1891 he was succeeded by his son, Mr. C. H. Higginbotham, who retired in 1924.

The store forming the front portion of the firm's premises, shown in the accompanying illustration, was erected in 1904. Its stock of books is truly enormous, and covers every branch of literature. The firm are contractors for the supply of books to Government departments, colleges, and schools, in the Madras Presidency. They are also bookstall contractors to the South Indian Railway and the Madras and Southern Mahratta Railway, and have been so for many years. Their publications form a large and important addition to the literature of the country, and include J. D. Mayne's standard work on Hindu law. In addition

to the sales departments a circulating library was started in 1926, and has proved immensely popular.

Messrs. Higginbotham and Co. developed a very extensive trade as general printers, stationers,



"HIGGINBOTHAM'S," MADRAS.

account-book manufacturers, die-sinkers, relief stampers, copper-plate engravers, etc., and that branch of their business was in 1912 formed into a separate company under the name of Associated Printers (Madras), Ltd. In 1925 a new company was formed for the amalgamation of the combined interests of Higginbotham and Co., Associated Printers (Madras), Ltd., and the Madras Mail, under the style of Associated Publishers (Madras), Ltd. Thus, behind the familiar red "Higginbotham's" bookstore is an extensive range of buildings occupying an area of about two acres, where everything relating to printing and its allied activities is executed on a scale that necessitates the employment of between 300 and 400 persons. The work in each department is of a very high standard, and leaves nothing to be desired. No fewer than fifty printing machines are in use, including a Dawson, Payne and Elliott colour printing machine taking a sheet of 30 by 40 inches.

THE "MADRAS MAIL," Mount Road.

THE *Madras Mail*, established in 1868, is the leading Anglo-Indian newspaper in Southern India. Its first number was produced on December 14, 1868. The original proprietors were Mr. C. A. Lawson (afterwards Sir Charles Lawson) and Mr. D. Cornish, both now deceased. In 1887 on the occasion of the Jubilee of Queen Victoria, Sir Charles Lawson received his Knighthood. He was the only journalist in Madras province to have that distinction conferred on him. Previous connection with the Madras Press afforded both the original proprietor-editors some conception of what all classes in Southern India expected of a journal of the character of the *Madras Mail*, which

was started, as few newspapers did, with a large subscription and advertisement list and quickly established a reputation as the then foremost daily newspaper in India. The only other daily in existence in India at that time was the *Madras Times*, which within recent years was incorporated with the *Madras Mail*.

From the commencement of its career, as indeed it is to-day, the *Madras Mail* has been a most outspoken critic of men and matters, and the traditions of the two original proprietor-editors have been maintained by their successors, Mr. A. E. Lawson, C.I.E. (retired, the son of the late Sir Charles Lawson), Mr. H. K. Beauchamp, C.I.E.

(deceased), Mr. T. P. Sheppard (acting), Mr. L. E. Kirwan (acting, deceased), Mr. T. E. Welby (acting), Mr. D. Scott Bremner (retired), and Mr. F. Willows, the present editor.

The *Madras Mail* has a well-organised news service, both foreign and Indian, employs an efficient staff, and is well-served by district correspondents throughout the districts of Madras, the Indian States of Mysore, Travancore, Cochin, Pudukottah and the Nizam's Dominions. It is gradually attaining, if it has not already attained, that influential position which the Fourth Estate in England occupies. The general views of the journal in questions political, military, financial, educational and otherwise have always received the approbation of a discriminating public, and its sympathy with the legitimate aspirations of the people of India in the present political crisis is being widely appreciated.

The *Madras Mail* celebrated its golden jubilee on December 14, 1918, when an address of congratulation was presented to the late Mr. W. D. St. Leger, the agent of the proprietors in Madras. This year (1928) the paper will celebrate its Diamond Jubilee.

In January, 1921, the original partnership was transformed into a private company, and to cope with the increasing needs for more and better accommodation the old rented premises on First Line Beach, Georgetown, the home of the paper for more than half a century, were abandoned for new and up-to-date offices which had been built in a prominent situation on the Mount Road,

GORDON, WOODROFFE and CO. (MADRAS), LTD., Importers, Exporters, Shipping, Insurance and General Commission Agents, 21, North Beach Road.

AMONGST the largest and most important firms in Madras are Messrs. Gordon, Woodroffe and Co. (Madras), Ltd., whose activities are on a very comprehensive scale. They are, for instance, extensive importers of piece-goods, yarns, sugar, metals, cement, matches, hardware, sundries, etc., and are amongst the largest exporters of tanned and dry salted hides and skins, jute, hemp, seeds, palmyra fibre, castor oil and all kinds of Indian produce. Far reaching likewise is the influence of their operations as landing, clearing, forwarding, shipping, insurance and general commission agents; and they have branches at Vizianagram, Coconada, Vizagapatam, and Pondicherry. They are managing agents for the Vizianagram Press and Mills Co., Ltd.

The business was established in 1872 by Mr. G. W. P. Woodroffe and Mr. H. E. Gordon, and one of the later partners was Sir Hugh Stein Fraser. In 1924 the firm was incorporated as a limited liability company, and the managing directors are Sir James Fletcher Simpson, Mr. R. C. M. Strouts, and Mr. A. S. Todd.

Sir James Fletcher Simpson has been in India for nearly thirty years, and has been associated with various public activities in Madras Presidency. He is very popular amongst the Indians, and is noted for his sympathetic attitude towards

the spacious compound of Government House. The new press room has been fitted with the most modern machinery and appliances. The printing establishment is now in charge of a superintendent expert from England with a high professional reputation. To the printing rooms is attached a first-rate process department capable not only of catering for the pictorial features introduced in the paper within recent times, but of executing large orders from outside clients for line and half-tone blocks.

Special features of the journal to-day are its engineering, planting, motoring, and scout supplements and its illustrated cinema and fashion pages, which provide those interested with the most up-to-date literature on the subjects mentioned. The idea of issuing an art-coloured illustrated Annual was first conceived and carried out in 1922, and each year the Annual is gaining in popularity. It can be compared favourably with the best illustrated publications of the kind issued in England, and circulates not only throughout India and Great Britain, but copies have reached the reading public on the Continent of America.

The *Madras Mail* issues daily and weekly editions. The latter is largely in demand by officials, business men and others who have retired from the field of their labours in India and desire to keep in touch with the old country. The present proprietors are the Associated Publishers (Madras) Ltd., and their London agents are Messrs. D. J. Keymer and Co., at the corner of Whitefriars Street, E.C.

their political aspirations. He is one of the Governors of the Imperial Bank of India, and is at present President of the Madras Board of the Bank. He has also been Chairman of the Madras Chamber of Commerce, and represented that body in the Madras Legislative Council. He was knighted in 1921 in recognition of his prominent and important activities for the welfare of the community.

The cable address of Messrs. Gordon, Woodroffe and Co. (Madras), Ltd., is "Woodroffe."

They are agents for the following:

- Clan Line of Steamers.
- Anchor Brokebank Well Line.
- American & Indian Line.
- T. & J. Harrison.
- Swedish East Asiatic Co.
- Hansa Line.
- Norwegian Line.
- Africa & Australia Line Shipping Co., Ltd.
- Canton Insurance Office, Ltd.
- James Finlay & Co., Ltd.
- Hongkong Fire Insurance Co., Ltd.
- London Assurance Co., Ltd.
- Sea Insurance Co., Ltd.
- Scottish Union & National Insurance Co., Ltd.
- Tokio Marine & Fire Insurance Co., Ltd.
- Union Insurance Society, Canton.
- Yorkshire Insurance Co., Ltd.
- Yang-tze Insurance Association, Ltd.

W. A. BEARDSSELL and CO., LTD., Merchants and Commission Agents, 7, Second Line Beach

THE business of Messrs. W. A. Beardsell and Co., Ltd., was established in 1902 by Mr. (now Sir) William A. Beardsell, and associated with him was Mr. W. H. Johnston, who joined up at the outbreak of the Great War, rose to the rank of Lieut.-Colonel, and won the D.S.O. and M.C. In June, 1914, the firm was converted into a limited liability company with the two gentlemen mentioned as directors. The present directors are Sir William Beardsell, Mr. F. Leslie Coles, Mr. S. Jackson, and Rao Bahadur P. Aiyannae Chetty.

Messrs. W. A. Beardsell and Co., Ltd., are amongst the largest importers in Madras of piece-goods, yarn, and artificial silk, and are agents for

Courtaulds (India), Ltd.

Horrockses, Crowdsen & Co., Ltd., Manchester.

The National Guarantee & Suretyship Association, Ltd.

The General Accident Fire & Life Assurance Corporation, Ltd.

North British & Mercantile Insurance Co., Ltd.

Commercial Union Insurance Co., Ltd.

National Insurance Co. of Great Britain & Ireland, Ltd.

The firm's telegraphic address is "Beardsell," and the codes used by them are Bentley's and private.

Sir William Beardsell is well known in Madras for his many-sided public activities. From the

outset of his career in the Presidency he has taken a keen interest in the spread of education, especially by Christian missionary agencies, and is a prominent member of the Council of the Madras Christian College. He has been a generous supporter of both the Y.W.C.A. and Y.M.C.A. movements, and some years ago he presented the Madras Y.W.C.A. on the Poonamalle Road with a handsome hostel for European and Anglo-Indian girls. The site for the hostel, which is called St. Margaret's Hostel, was found by the Y.W.C.A., but the fine building was put up by Sir William Beardsell at his expense and handed over to the Y.W.C.A., which now manages the hostel. He has also been a munificent donor to the funds of the St. George's Homes at Kati, and has been associated with that institution from its commencement. During the war he rendered great service as Secretary to the special Y.M.C.A. fund which was developed for the purpose of sending comforts to the Madras troops at the Front.

For two years in succession—1918 and 1919—Sir William Beardsell served as Sheriff of Madras. Keenly interested in fine art, he was President of the Madras Fine Arts Society for several years. He has been also on the council of the Victoria Technical Institute, Madras.

ADDISON and CO., LTD., Automobile Importers and Engineers, Printers, Stationers, Bookbinders, Engravers, etc., Mount Road.

MADRAS presents extraordinary contrasts in the size and character of its business houses. In the Mount Road district, for instance, where the principal stores and motor firms are located, the large English establishments utterly dwarf the small native undertakings. Amongst the former are Messrs. Addison and Co., Ltd., who give employment to about 900 persons. Their business was started as a small printing concern in 1875, and that section of it, entitled The Addison Press, has developed into one of the largest typographical concerns in India. Bookbinders, account-book manufacturers, copper-plate printers and engravers, lithographers, rubber stamp makers, etc., Messrs. Addison and Co., Ltd., have been awarded gold and silver medals for the excellence of their work, and are printers and stationers by appointment to H.E. the Governor of Madras.

Their store for general stationery, office equipments, scientific and survey instruments, watches and clocks, jewellery and general fancy goods is one of the most attractive of the local shopping resorts. Conterminous with it is the department for cycles and motor-cycles, with its display of such well-known makes as the Triumph, B.S.A., and Humber for which the firm are agents.

But in no direction have Messrs. Addison and Co., Ltd., achieved greater attainments than as automobile engineers and importers. In their showroom, fronting their printing works, may

be seen models of the Dodge, Morris-Oxford, Morris-Cowley, Overland, Willys-Knight, Armstrong-Siddeley and Standard cars for which, as well as for the Graham Bros. trucks, Messrs. Addison and Co., Ltd., are agents. About a quarter of a mile farther along the same thoroughfare are situated the firm's motor engineering works, which occupy about 4 acres and give employment to about 450 persons.

As already indicated, the business was started in 1873 as a small printing concern. In 1886 it was purchased by Mr. T. Luker, who in 1892 added to it a department for cycles, and was one of the pioneers in that trade in Madras. In 1904 Mr. Luker turned his attention to the potentialities that were looming in the motor industry, and made preparations to meet the great demands that eventuated in that connection. In 1906 he was joined in partnership by his sons, Messrs. W. H. and A. T. Luker, and under their joint direction the business entered on a new era of development. The firm were the first to instal a complete Harvey Frost vulcanizing plant in Madras for repairing motor tyres, and have always kept in line with every improvement that has taken place in motor engineering. Branches of the business are established at Bangalore, Trichinopoly, and Madura. The firm's telegraphic address is "Addison and Co.," and the codes used by them are the A B C 5th edition, Bentley's, and private.

A. BRUNNSCHWEILER and CO.,
Importers, Exporters, and Commission Agents, 104, Armenian Street.

MESSRS. A. BRUNNSCHWEILER AND Co. specialise in the exportation of the famous Madras "handkerchiefs." These are not actual handkerchiefs, but piece-goods in innumerable colour designs, hand woven by the peasants of Southern India in their village homes. The quality of Madras handkerchiefs varies considerably, and great knowledge and experience are necessary for a business to be conducted in them like that of Messrs. A. Brunnschweiler and Co.

As importers Messrs. A. Brunnschweiler and Co. handle a large variety of merchandise, including yarn, piece-goods, pumps, engines, and all kinds of machinery, especially for match and knit-

ting factories. In that connection they have supplied and installed equipments for a goodly number of establishments in Southern India.

The business of Messrs. A. Brunnschweiler and Co. was started in 1907, and they had their headquarters at Manchester until 1922. In that year the Manchester concern was separated and the Madras house became a branch of Société Anonyme Frohlich, Brunnschweiler and Co., who have their headquarters at Ennenda, Switzerland. The firm's telegraphic address is "Brunswel," Madras, and their codes are Bentley's, Universal Trade, A B C 5th edition and private.

FREUDENBERG and CO., Motor Engineers and Importers, Mount Road.

THE history of the well-known firm of Freudenberg and Co. will be found in the section of this volume devoted to Colombo, where they have been influentially established since 1869. Early in 1927 they opened their branch at Madras, which, under the able management of Mr. C. W. Gay, has become one of the most notable of the local motor undertakings. The organisation of most garages is very much on the same lines, but Messrs. Freudenberg and Co., not content with ordinary attainments, have endeavoured to exemplify the superlative in its most utilitarian phases, with the result that in their premises in Mount Road are co-ordinated activities that represent the maximum of efficiency at the minimum of labour and cost. Customers calling there with their cars for repairs are provided with waiting rooms where they may read or write while their vehicles are being speedily and skilfully operated on. Conterminous with the waiting room is an Indian refreshment room where welcome eatables and drinkables are obtainable.

All the operations in this up-to-date garage are carried on with the latest appliances, including the new process of paint spraying by air pressure, which is very much better than the old-fashioned methods of hand labour. The completeness of the establishment is indicated by its foundry, its blacksmiths' department, its tinsmiths' shop, machinery shop with its excellent equipment, and the department for recharging batteries, etc.

The premises occupy about two acres, and their entire lay-out has been very cleverly accomplished as the result of careful study and long experience of the best methods of procedure in all branches of automobile engineering. The workmen are Indians born and trained in Africa, and were selected by Messrs. Freudenberg and Co. for their special ability in their respective jobs.

In the showroom may be seen models of the Paige Detroit Manufacturing Co.'s cars, for which the firm are agents.

TETLEY and WHITLEY, LTD., Wholesale Piece-goods Merchants, 17, Armenian Street.

MESSRS. TETLEY AND WHITLEY, LTD., are well known throughout India in connection with yarns and piece-goods, and have been prominently engaged in that trade for about thirty years. Textile or woven materials! Consideration of the vast range of goods embraced therein, and also of the overwhelming variety of designs in which they are made, the infinite variety of their chromatic effects, the endless difference in quality and texture, and the continual multiplicity of standard pattern and indiosyncrasy throughout all the wide field presented by such necessitous materials, gives appreciation of the knowledge and experience necessary for the successful management of a business like that of Messrs. Tetley and Whitley, Ltd., devoted, as it is, exclusively to wholesale trade in such things and yarns. At first it seems simple—not much to worry over, everything shipshape and clearly defined. Such, however, is not the case, for there are multitudinous details to be considered—the continual

fluctuations in market prices and demand and supply, and many other phases that only those familiar with the trade can adequately appreciate; but Messrs. Tetley and Whitley, Ltd., know that trade in all its potentialities, know exactly what to avoid and what to choose, know the designs most in favour with the people of India, and accordingly their importations are the result of careful study and experience of everything in connection with piece-goods and yarns best calculated to enhance their trade and good name amongst their many connections.

The headquarters of Messrs. Tetley and Whitley, Ltd., are in Manchester, and they are also established at Colombo as Thomson, Tetley and Co. The Madras branch is under the management of Mr. C. W. Wood. The telegraphic address is "Shipment," Madras, and the codes used are Parker's, Premier, A B C 6th edition, Bentley's, and private.

JONES and CO., Automobile Engineers and Importers, Mount Road.

Mr. L. G. JONES, founder and proprietor of the business indicated above, is a very well-known motoring authority in Madras, where he has been long and prominently engaged in the motoring trade. He served his time as an automobile engineer at the Belsize Motor Works, Manchester. In 1913 he went to Madras as manager of the motor workshops of Oakes and Co. (now incorporated in Spencer and Co., Ltd.). In 1915 he returned to England, and joining the R.A.S.C., M.T., served during the war in 623 M.T. Coy., London.

Returning in 1919 to Madras, he was appointed manager of Messrs. Spencer and Co.'s motor department, and continued in that position until 1927, when he started in business for himself under the name of Jones and Co.

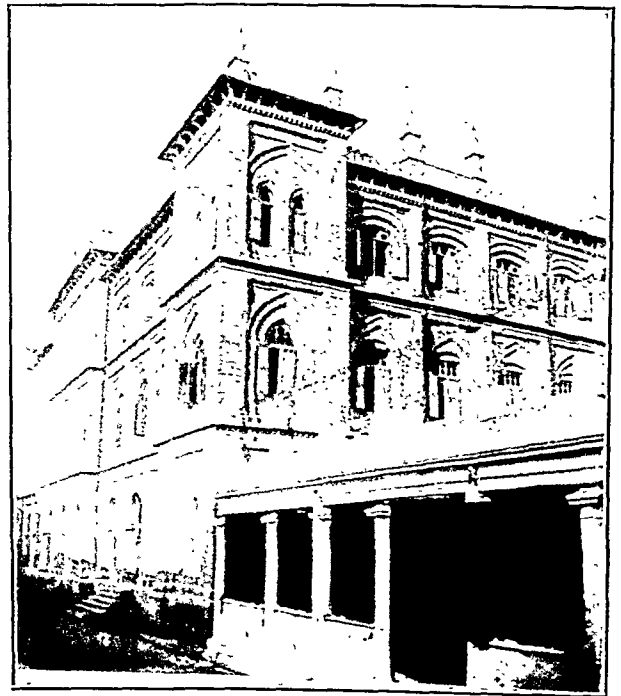
Mr. Jones is agent for the famous Chrysler cars, and while with Messrs. Spencer and Co. established excellent records for these magnificent

vehicles, doing the run from Madras to Ootacamund, a distance of 400 miles, in one day, and another run from Madras to Bangalore and back, a distance of 424 miles, also in one day. Records of over 100,000 miles—a distance equal to four times around the world—are continually being reported by owners of Chryslers, whose cars are now busy piling up even further mileage. Chrysler is able to build this great endurance into cars and sell them at low prices because of one-profit facilities. By manufacturing complete in Chrysler plants and eliminating the profits of outside parts makers, better quality can be offered at less cost to the buyer. Because Chrysler designs and builds all vital parts used in Chrysler cars, the finished vehicle constitutes one harmonious whole unit. Designed and built as a unit, it functions as a unit, resulting in finer, more efficient performance and thousands of miles of excess transportation.

**V. PERUMALL CHETTY and SONS, HOE and CO. ("Premier Press"),
Printers, Stationers, etc., Stringer's Street.**

MESSRS. V. PERUMALL CHETTY AND SONS, proprietors of the business carried on under the name of Hoe and Co., "Premier Press," have the distinction of being the largest firm of printers and stationers in Southern India. Their impressive premises in Stringer's Street, including a splendid three-storey building, cover an area of 10,000 square feet, and give employment to about 400 persons. Messrs. Hoe and Co. started in 1886 as printing contractors to the South Indian Railway, University of Madras, and the Municipalities and Local Fund District Boards of the Madras Presidency, and they execute printing of every description for native States, mining companies, Municipal Corporations, estates, banks and other institutions throughout Southern India. The diaries issued by the firm are well known and appreciated throughout the peninsula for the useful information they give. Copper-plate printing, die-sinking, relief stamping, illuminating, rubber-stamp making, engraving, machine ruling, and the manufacture of account books on a very extensive scale are carried on by them with noteworthy enterprise and ability. These premises are admirably equipped with a plant of the most modern description, including 2 linotypes and 3 monotypes, the latter being the only machines of that kind in Madras. The printing equipment comprises twenty large printing machines, including an automatic self-feeding machine (27 x 40) by Dawson, Payne and Elliott, for colour work. Their binding department is equipped with modern machinery consisting of folding machines, bracket stripping, automatic disc ruling machines and automatic paging machines, etc. The plant is operated by electricity and the power required is developed on the premises.

Messrs. V. Perumall Chetty and Sons also do a very large trade as general wholesale stationers, and their supplies in that direction are of the most comprehensive description. They started



**PREMISES OF V. PERUMALL CHETTY and
SONS (HOE AND CO.).**

their business in a very small way in 1840 and the success they have attained during this long period is certainly remarkable. In 1918 they purchased from the Government the Madras Pencil Factory, described in the following article.

THE MADRAS PENCIL FACTORY, Washermanpet.

THE only pencil factory in India is the one indicated above, which is the largest undertaking of the kind in the Orient. It gives employment to 85 persons, is equipped with up-to-date machinery, and has an average output of 300 gross of pencils per day of eight hours. It was originally started on a small scale by the Government of Madras, but was given over to a private agency owing to a changed policy in the administration. The establishment covers about an acre of land, and was planned and built by Messrs. V. Perumall Chetty and Sons, under whose capable direction

order that the graphite may become thoroughly dried and hardened. When that has been accomplished the leads are ready for enclosure in wooden coverings, which is effected by other very cleverly constructed machinery. The woods used for that purpose are Indian elavu, African cedar and Californian redwood. The planks are converted into thin slats of various sizes with grooves of suitable calibre, into which the baked graphite sticks are placed and covered with glue. Other similar slats, with corresponding but empty grooves, and covered on their flat sides with glue, are placed



THE MADRAS PENCIL FACTORY.

it has become very successful, and its products find their way to all parts of the Indian Empire.

The graphite, or black lead, of the pencils is obtained from Ceylon, which is the world's best source of supply of that material. After undergoing elaborate grinding and purifying processes by very ingenious machinery invented for that purpose, the graphite is pressed by other equally wonderful contrivances through bores of varying thicknesses, according to the sizes required, and emerges therefrom in the form of plastic string, which is placed on wooden boards and cut. Each board is of the length of three pencils respectively, and the boardful of graphite is cut into single pencil lengths by two strokes of the operator's knife. Thereafter the plastic leads are baked in a furnace at a temperature of 1100° Fahr. in

on top of the graphite slats, and the resulting sandwiches are placed in screw presses, where they are kept under pressure until the pair of slats becomes one solid whole. They are then cut by machinery into individual pencils, polished by sandpapering machinery, and varnished by machinery. Their manufacture is finally completed by stamping machines, which imprint on them in silver and gold their well-known names "Star of India," "National," "Commercial," "Universal," "Pioneer," and "Young Elephant." All kinds of pencils are made in the factory, including copying ink pencils and crayons, and for their quality were awarded a bronze medal at the British Empire Exhibition at Wembley in 1924, as well as gold and silver medals at various Exhibitions in India.

HOPE, PRUDHOMME and CO.,

Merchants and Commission Agents, Fontenoy Buildings, Angappa Naick Street.

THE firm of Messrs. Hope, Prudhomme and Co. is a typical old commercial house that sustains the best traditions of commercial procedure and integrity in all its activities. It was established in 1887 under the name of Closets, Prudhomme and Co., and assumed its present name in 1901. The original partners have passed away, and the sole proprietor now is Mr. E. B. Prudhomme, who succeeded to the business after the death of his father at the beginning of the present century.

Messrs. Hope, Prudhomme and Co. are exporters of skins and hides, oil cakes, seeds, and other Indian produce, and their chief imports are yarn, sundries, paints, and V. Carlbhan's gold

and silver threads, for which they are chief agents in India.

They are also agents for

Ripolin Paints.
The Red Hand Compositions, Ltd., London.
Jeyes' Sanitary Compounds Co., Ltd., London.
British Equitable Assurance Co., Ltd.
The Eagle, Star & British Dominions Insurance Co., Ltd.
The Motor Union Insurance Co., Ltd.
Scottish Union & National Insurance Co., Ltd.
London & Provincial Marine & General Insurance Co., Ltd.
Royal Exchange Assurance Corporation.
The Batavia Sea & Fire Insurance Co., Ltd.
The telegraphic address of Messrs. H. B. Prudhomme and Co. is "Fontenoy."

THE UNITED INDIA LIFE ASSURANCE CO., LTD., 10, McLean Street.

THE UNITED INDIA LIFE ASSURANCE CO., LTD., was founded in 1906 with Madras as its headquarters under the chairmanship of the late Dewan Bahadur K. Krishnaswami Rau, C.I.E. The primary object in establishing it was to place within easy reach of the inhabitants of Southern India the manifold advantages of life assurance, and to afford them the opportunity of insuring in a company which they could call their own, and over whose funds and management they could exercise perfect control. Up to the time of its establishment, and, in fact, even until the present date, there is not any other life assurance company in Madras whose funds are kept in Madras under the immediate supervision of its constituents.

The absolute security essential to a life assurance company is afforded in its most substantial form by the "United India." For still further protecting the interests of its policy-holders and placing such protection on a permanent and unalterable basis, the company has now provided that not less than 85 per cent. of the entire premiums (excepting the first year's) and the entire interest thereon shall constitute a trust, and such trust fund shall always remain the *minimum* security of its policy-holders.

The utmost economy is exercised in conducting the business of the company. The importance of this cannot be over-estimated, as it is a clearly established fact that in the history of life assurance nothing is so conducive to failure as extravagant management.

The Chairman of the company is Sir M. Ct. Muthiah Chettyar, who is a well-known and most influential banker and commercial magnate, President of the Southern India Chamber of Commerce, Chairman of the Madras Stock Exchange, a Director of the Indian Bank, Ltd., a Trustee of Pachaiyappa's Charities and the Madras Port Trust, a Councillor of the Madras Corporation, Chairman of the Hindu High School Committee, and Member of the Advisory Committee of the South Indian Railway, etc. The company is managed by Messrs. Star and Co., the partners of which are Mr. M. K. Srinivasan, B.A., B.L., a well-known and prominent figure in life insurance circles in India, and Mr. M. P. Annamalai Chettyar, a banker belonging to the Nattukottai Chetty community. The assets of the company exceed twenty lakhs of rupees, the entire amount being invested in gilt-edged securities and other first-rate investments.

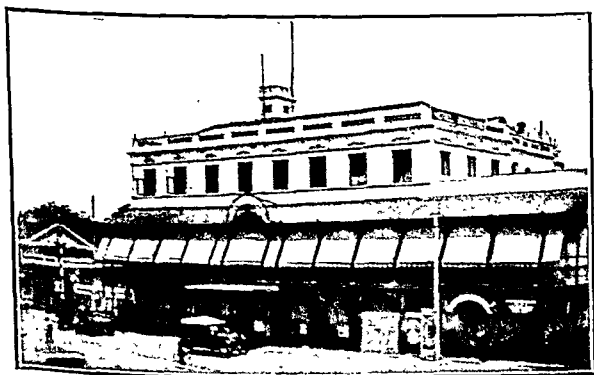
The aim of the company is safety—complete and absolute safety—of the interests of its policy-holders and the general insuring public. The Directors of the company are:—

Sir M. Ct. Muthiah Chettyar, Kt. (Chairman),
Mr. Arni Subba Rau, B.A.,
Rao Bahadur V. Shanmugam Mudaliar,
Mr. V. Thiruvengadathan Chettyar,
Mr. K. C. Narasimhachariar,
Mr. V. C. Rangaswami, B.A.,
Mr. M. K. Srinivasan, B.A., B.L. (Ex-officio).

The registered office of the company is at No. 10, McLean Street, Post Box. 281, Madras.

HOTEL BOSOTTO, Mount Road.

As indicated elsewhere in these pages, Madras is an extraordinarily spacious city, and the distance between its extremities is truly great. Excellently situated in the heart of the Mount Road district and, therefore, close to the principal stores, the



HOTEL BOSOTTO.

Hotel Bosotto is an attractive rendezvous, where shoppers may rest after their exertions and enjoy the amenities provided there under the noteworthy new management which has completely metamorphosed that establishment, formerly known as the d'Angelis Hotel.

The latter was originated by Mr. C. d'Angelis, an Italian confectioner, who started business in Madras in 1880 as a restaurateur and general caterer, and succeeded so well that in 1908 he built the d'Angelis Hotel, which he managed until his death some years ago. Thereafter it was carried on by his successors, but did not gain much in popularity until it was taken over in 1925 by Mr. A. Bosotto, under whose regime it has been completely transformed by extensive improvements and additions.

The front of the premises has been widened considerably by the addition of a new wing, so that the covered verandah in front is now longer than ever. From the spacious entrance hall visitors are taken to the upper floors by an electric elevator, and no other hotel in Madras has that facility. On the first floor is the large new dining room with its attractive table display, where 150 persons can be comfortably seated. The drawing-room is artistically furnished and a very welcome place for the *dolce far niente* of the tropics. In the extensive billiard room players have the choice of three tables.

Eighteen new bedrooms have been added to the hotel, making a total of fifty apartments specially planned and appointed for the maximum of cool-

ness and ventilation. Each has its electric fan, electric lights, and call bells, wash basins with hot and cold running water, bath and toilet room with a real European enamelled bath—not a tub—and modern sanitary arrangements with unlimited water supply. No other hotel in Madras is similarly equipped in that respect.

All the ceilings are covered with embossed steel, which is not only a preventive against undesirable insects but also a practical safeguard against fire. Most of the flooring is covered with Minto tiles, thus ensuring the utmost cleanliness. No fewer than four large verandahs overlook the pleasant garden, or patio, of the hotel, which is a very popular resort for light refreshments and even for meals, as part of it has been appointed for that purpose and has a roof for protection from the sun during the day, but is open on all sides.

The culinary departments are under the charge of a European chef aided by a well-trained staff and equipment that has been brought into line with every modern requirement, including cold storage chambers for preserving perishable commodities in perfect condition.

The water supply of the hotel is exceptionally good, as, in addition to the town mains, there is in the garden a well thirty feet deep, with an unlimited supply of water, which is pumped to the lofty water tower that forms a notable feature of the hotel.

Mr. d'Angelis had developed an extensive trade in connection with bread baking and the manufacture of all kinds of cakes and confectionery. That branch of the business has received Mr. Bosotto's special attention in the general scheme of improvements, and in the bakery there is an excellent machinery equipment, including one of the celebrated Artofex dough mixers, which mixes 120 lbs. of dough in an hour. Mr. Bosotto's catering activities are on the most complete scale, and he undertakes everything in that connection for banquets, weddings, parties, dances, etc. In his wine store, for instance, there is a stock of alcoholic liquors of every description, including fine old wines well calculated to elicit the highest encomiums of the connoisseur.

MAHOMED MUSA HAJEE EBRAHIM and CO.,

Manufacturers' Representatives, Import and Export Merchants and Agents, 3/1, Godown Street.

THE trade done in the narrow, busy streets of Georgetown is very considerable. One of its noteworthy thoroughfares is Godown Street, and among the many native firms located there none is more worthy of notice than Messrs. Mahomed Musa Hajee Ebrahim and Co., who have been established for about thirty years, and have built up a business that has its ramifications near and far. The merchandise handled by them is very comprehensive; but the great bulk of their trade is in piece-goods, and they have naturally minute and extensive knowledge of the patterns and qualities most popular in the native bazaars, where the greater portion of their trade is transacted.

The firm are also exporters of produce, and are well-known as manufacturers' representatives. They are distributors for The Imperial Tobacco

Co. of India, Ltd., and sole agents in Madras for Samuel Jones and Co., Ltd., Paper Merchants, London; Clark, Brangwin and Co., London; "Thonet" Austrian Bentwood Furniture; Adamjee Trading Co., Ltd.; Rangoon Safety Matches, "Cowhead," "Cat," etc., Brands; The Deli Biscuit Co., Ltd.; Western India Confectionery Co.; Dr. D. Writer and Co.; and they invite inquiries from manufacturers and others desirous of extending their connections in Southern India.

The concern was founded by the grandfather of the present proprietors, Messrs. Md. Musa Sait and Md. Ismail Sait; and there is a branch of it at Bangalore. The firm's telegraphic address is "Islam," and their codes are the A B C 5th edition, Bentley's, and Western Union.

THE INDIA CO., LTD. } THE GARAGE, LTD. }

Taylor's Yard, Mount Road.

TAYLOR'S YARD, the premises of The Garage, Ltd., rented from the Government, is about an acre in extent, and is excellently adapted for the requirements to which it is devoted. The offices on one side are very handsomely appointed, and are used sometimes for private banquets and dances.

The Garage, Ltd., was formed in 1920 and operates the Government mail service within the Municipal areas of Calcutta and Madras. For that purpose it has about 100 motor vans and busses, and is the principal undertaking of its kind in India. It is interesting to note that The Garage, Ltd., built the two mail vans which were used to convey the mails of the Prince of Wales

and his entourage during the tour of His Royal Highness throughout India.

The agents for The Garage, Ltd., at both Calcutta and Madras, are The India Co., Ltd., formed in 1919, and engaged in the importation of motor cars, accessories, coal tar, etc., and also as wholesale agents of the Tata Iron and Steel Co. for steel materials. The managing director of The India Co., Ltd., is Mr. C. Rajan. The manager of both companies at Madras is Mr. T. A. Natesan. The telegraphic address of each company is "Fairdeal," at Madras and "J. & C. cab" at Calcutta, and the code used is the A B C 5th edition.

VEST and CO., Printers, Publishers, Bookbinders, Engravers, etc.
"DAILY EXPRESS." THE MADRAS PUBLICITY CO., LTD., Mount Road.

THE MADRAS PUBLICITY CO., LTD., was formed in 1920 with an authorised capital of 5 lakhs of rupees for the primary purpose of establishing a newspaper that would promote harmony and co-operation between all races, classes, and communities, as per the prospectus, which continued as follows: "It is felt, indeed, that, without challenging the necessity and value of existing newspapers, scope exists for a newspaper which, adopting itself to the new political conditions created by the Reforms Act, will, in ownership and outlook represent both British and Indian interests, and will strive to reconcile them in our public life. Such a newspaper would endeavour, not to supplant, but to supplement, the party newspapers already in the field, and it is believed that a journal so motivated would not be long in attaining a foremost position in the public estimation."

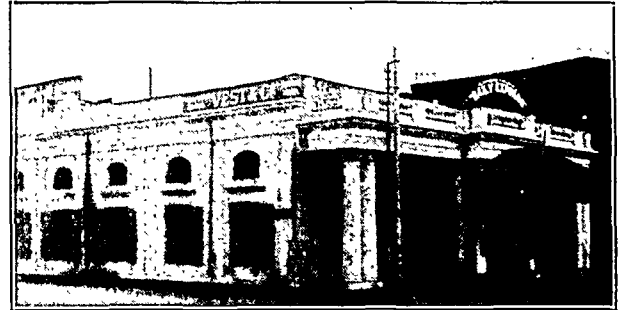
Accordingly the *Daily Express* was established under the editorship of Mr. R. W. Brock, who had been formerly editor and manager of the *Madras Times*. The latter journal was thenceforward incorporated in the *Madras Mail*. The *Daily Express* is an independent newspaper, working for the social and material uplift of the people and for the attainment by India of Dominion status within the British Empire. It is the only newspaper in South India with two editions; and of its many special features, sporting is the most prominent. The present editor is Mr. A. Ramaseshan, who succeeded Mr. Brock.

V. SUBRAMANIAN and BROS., Electrical Engineers and Contractors, 3-156, Broadway.

WHEN a prominent position is attained in any business in the face of strong competition, there must, of course, be a reason for it. The position occupied by Messrs. V. Subramanian and Bros. as electrical engineers and contractors is not the result of fortuitous circumstances, but of thorough knowledge and experience in combination with enterprising ability that seizes every opportunity to improve upon past attainments and demonstrate the superlative in every detail. In electrical engineering, considerations that are to the untrained individual apparently of little, if any, importance, present, however, to the skilled electrician just those matters for care and accuracy that evolve satisfaction and success; and it is upon the lines of specialised operation and fastidious regard for everything that can contribute to the perfection of process and result that Messrs. V. Subramanian and Bros. operate. There is nothing associated with the wide domain of electricity that they are not prepared to undertake for illumination or power. They are the first Indian firm in Madras to hold warrant of appointment to the Government as electrical engineers, and are sub-contractors to the Kandukathan Electric Supply Corporation, Kamukathan, Chettinad, as well as consult-

The Madras Publicity Co., Ltd., also took over the old established business of Vest and Co., printers, bookbinders, stationery manufacturers, die sinkers, engravers, etc.

The managing director of the Madras Publicity Co., Ltd., is Mr. H. M. Ebrahim Sait, who is



PREMISES OF VEST and CO,

the soul of this concern, and whose financial assistance to it has been considerable. Mr. Ebrahim Sait is owner of a considerable amount of land and house property in Madras, Ootacamund and elsewhere, and also various tea and coffee plantations. For many years he has been the managing director of South India Industrials, Ltd., the practical owners of which are the members of the well-known Sait family of Ootacamund, Nilgiris, connected with the name of Khan Bahadur Hajee Abdul Rahiman Hajee Fakeer Mohamed Sait, whose only surviving son is Mr. Mohamed Hashim Sait.

ing electrical engineers to the Nattarasankottai Electric Supply Corporation, Ltd.

Messrs. V. Subramanian and Bros. supply all kinds of electrical fittings, fancy electroliers and chandeliers, fancy shades and illumination glassware, L.T. and H.T. switchgear, D.C. and A.C. ceiling fans and table fans, Philips and Vacuum lamps, Hellesen's dry cells for automobile, cycle, lighting, and wireless trades, high-grade measuring instruments, telephones, and accessories, and are sole agents for

Foster Engineering Co., Ltd., Ironclad, Switch and Fuse Gear, London.

Deutsche Kabelwerke, A. G., Manufacturers of Electric Wires and Cables, Berlin.

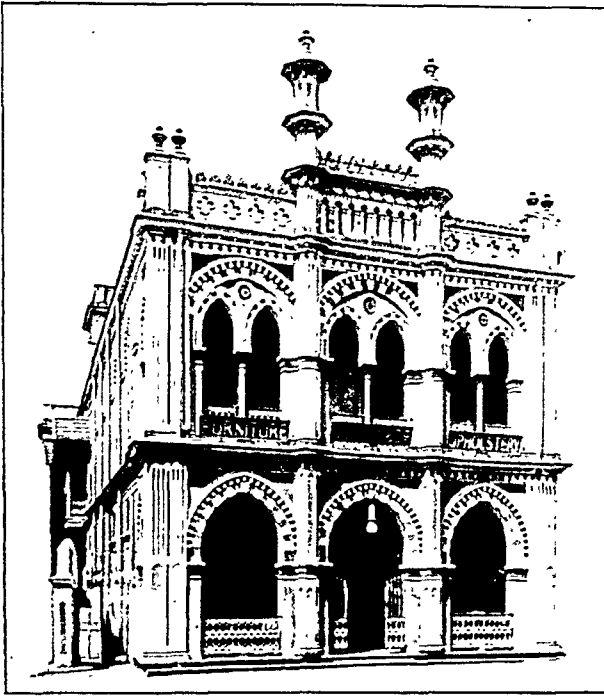
Hellesen's E. N. K. E. & V. Ludingsen, Ltd., Dry Cells, Denmark.

A. H. Hunt, Ltd., Accessories for Electric Wireless and Motor Trades, England.

The firm give employment to a staff of thirty skilled men, under the personal supervision of the partners, Messrs. K. Narayanan, V. Subramanian, and N. Narayanan, each of whom is a practical and experienced electrical engineer. Messrs. V. Subramanian and Bros. have branches at Madura, Chettinad, and Trichinopoly. Their cable address is "Admirable," Madras, and their codes are the A.B.C. 5th edition, Bentley's, and private.

CURZON and CO., Furniture Manufacturers, Mount Road.

THE influence of furniture is a subject on which much could be written. Nothing is more familiar nor enters more intimately into the daily routine of life than the equipment of the home; and when



PREMISES OF CURZON and CO.

furniture is artistic as well as utilitarian, the constant impressions received from it by the subconscious as well as the conscious mind are of greater import than enters into the philosophy of the uninitiated or unreflective. In view of these considerations, the business of Messrs. Curzon and Co. is of particular interest; and it would be

exceedingly interesting were it possible to ascertain what has been accomplished in the realms of psychology by the adaptability and beauty of the firm's productions in furniture of every description. Their multiplicity of designs include not only accurate copies of the most notable styles of the past and the present, but also clever creations of their own that are specially suited to the exigencies and requirements of the Madras climate. Amongst the many beautiful examples of their carved woodwork are tables in many designs, with legs in the form of tusked elephants and birds, some of them having in their centres remarkably fine carved representations of Indian mythology. Similarly exquisite workmanship is also seen in their large variety of ivory overlay articles, which are eminently suitable for mementoes and gifts. The firm are equally proficient in upholstery as in woodwork, and the great variety of their fabrics provides a very extensive selection for every idiosyncrasy of taste and need in that connection.

Messrs. Curzon and Co. are the largest exclusively furniture manufacturers in Southern India, and in their factory in Madras about 100 persons are employed in the production of furniture and woodwork of every description, including architectural requirements such as doors and window frames, shop fittings, etc. The firm have made furniture for Royalty and prominent personages in India, and apart from their extensive manufactures, they are also large importers of general furnishings, iron and brass bedsteads, spring mattresses, etc.

The business was established in 1898 and was taken over in 1925 by its present owner, Mr. C. Seshachalam, M.A. The firm's telegraphic address is "Curzonco," and the codes used by them are the A B C 5th edition and Bentley's.

**R. PATEL and CO., Importers and Manufacturers of Cycles, Motor Importers and Engineers,
General Patters Road, Mount Road.**

THE history of human progress is largely a matter of wheels, and the story of the development of the business of Messrs. R. Patel and Co. is entwined with the evolution of pneumatic tyred wheels for nearly three decades. That concern was started in 1901 by Mr. A. F. Khabardar as a dealer in cycles. Later he started their manufacture, and is well known in the cycle trade in England as well as throughout India.

When the development of the automobile industry began, Mr. Khabardar, realising its potentialities, adapted his premises to meet the motoring requirements of the public. To-day, therefore, after many years' constant study and practice of automobile engineering in all its branches, Messrs. R. Patel and Co.'s service and supplies in that connection are exemplary of the same spirit of enterprise and ability that has characterised their activities in the cycle trade.

In the electrical department, for instance, 150 of the celebrated Westinghouse batteries, for which the firm are sole agents in Southern India, are always kept ready for immediate delivery. The premises comprise no fewer than 12 godowns with thousands of cases of goods to meet the requirements of the firm's trade. They are agents for 175 manufacturing firms, and their stock list runs into 40,000 different items. They are also agents for the Rover, Sun, New Hudson, Hobart, Coventry Ensign, Coventry Challenge, Starly Minoru, and other cycles, the Radio motor cycles, the Wolseley, Buick and Oldsmobile cars, and the G.M.C. Yellow trucks. Their staff of 150 persons includes Englishmen, Germans, Parsis, Hindus, Mahomedans, etc. At Bangalore Messrs. R. Patel and Co. have another business almost as large, with two establishments in that town, under the name of the Bangalore

Cycle and Motor Co. They are similarly established at Secunderabad as the Secunderabad Cycle and Motor Co., and have also branches in Georgetown, Madras.

In partnership with Mr. Khabardar are Messrs. F. Bryamshaw and S. D. Grant. The firm's telegraphic address is "Minoru," and the codes used by them are Bentley's and private.

A. R. DURAISWAMI AIYENGAR,

Manufacturers' Representatives, 314 and 315, Linghi Chetty Street.

IMPORTANT foreign firms desirous of appointing reliable agents at Madras and the other towns of India have often great difficulty in securing the right kind of persons with whom to entrust their local business. It not infrequently happens that the agents they appoint are not specialists in the work of placing new goods on the market, and are even unsuitable for maintaining a good trade in well-known commodities through the multitude of other interests, inadequate staff, or the various undesirable considerations of character and resources that may be quite unknown to the foreign manufacturers whom they represent. Accordingly, it is pleasing to refer to Mr. A. R. Duraiswami Aiyengar, who is one of the best known and successful manufacturers' representatives in Madras, where he has been operating since 1913. No one understands better than he the conditions and potentialities of the markets of Southern India for commercial commodities of every description, and being a well educated and respected native of the country, he has the entrée into circles best calculated to enhance his activities as a commercial ambassador of proved integrity and ability. Mr. Duraiswami Aiyengar employs a staff of experienced travellers who are continually touring throughout the Presidency in the interests of the many celebrated firms represented by him, including the following:

Lever Bros., Ltd., Port Sunlight and their associated companies.

It may be mentioned that Mr. Khabardar has attained not only considerable distinction as a poet in Gujarati literature, but has also a wonderful gift of expression in the English language, and his exquisite lyrics and songs, published in book form under the title of *The Silken Tassel*, are most beautiful in their musical lilt and sublimity of thought.

A. & F. Pears, Ltd.
Vinolia Co., Ltd.
Blondeau et Cie., Ltd.
W. Woodward (1920), Ltd.
Ed. Cook & Co., Ltd., London.
Ben. Brooke & Co., Ltd., Port Sunlight.
Hodgson & Simpson, Ltd.
Hazlehurst & Sons, Ltd.
R. S. Hudson, Ltd., Liverpool.
Angus Watson & Co., Ltd., Newcastle-on-Tyne.
Planters' Products, Ltd., Watford.
C. & E. Morton, Ltd.
Chas. Morgan & Co., Ltd., Alpeco Pencils, Ltd.
Cosmic Crayon Co., Ltd.
The Altura Pen & Pencil Co., Ltd.
L. G. Sloan, Ltd.
Auto-Strop Safety Razor Co., Ltd.
Ardath Tobacco Co., Ltd.
W. P. Lowrie & Co., Ltd., London.
Th. Muhlethaler, S. A., Nyon, Switzerland.
Lamm Bros. & Co., Antwerp.

The telegraphic address of Mr. Duraiswami Aiyengar is "Perfumes," and the codes used by him are Bentley's and private. He is, we may add, a member of the South India Chamber of Commerce, member of the Royal Asiatic Society of Great Britain and Ireland, Ex-Secretary of the Madras Provincial Congress Committee, present Secretary of the Madras Mahajana Sabha, trustee of the National Fund and Industrial Association, Madras, director of the Swadesa Mittran, Ltd., Madras, and takes an active part in political, religious, and educational movements.

LAKSHMI RATANS, LTD.,

Commission Agents and Importers of Building Materials, 316, Thambu Chetty Street.

MESSRS. LAKSHMI RATANS, LTD., are largely engaged in the importation of all kinds of building materials such as cement, marble, paints and oils, pipes and fittings, hardware, tools, etc., and are one of the principal firms in that line of trade in Madras. Amongst their importations are numerous specialities that solve problems for the maximum of effect at the minimum of time and labour, for in the great range of things comprised by building materials new improvements and inventions are being continually made that relegate many former methods and commodities to the limbo of the obsolete. Messrs. Lakshmi Ratans, Ltd., always keep in line with the march of progress, and an excellent example of their doing so is afforded by their floorings, which are to be found in a very large number

of local buildings, including all the banks, clubs, colleges, hospitals, hotels, Government buildings, commercial offices, private residences, and institutions of the city.

The business, which gives employment to a clerical staff of about 25 persons and a large number of labourers, was established in 1892, and was formed in 1916 into a limited liability company, the directors of which are Messrs. R. V. Lakshmi Ratan, R. B. Lakshmi Ratan, and R. V. Lakshmi Ratan, Jr. The firm's telegraphic address is "Lux," Madras, and the codes used by them are the A B C 5th and 6th editions and Bentley's. They are agents for Twyford's, Ltd., Sanitary Engineers, Hanley, and the Carron Co., Glasgow, besides a number of Continental houses.

THE HOTEL CLARENCE, Rundall Road.

THE HOTEL CLARENCE specially appeals to people who do not want to stay in a big, expensive establishment. A hotel can be first-rate and not be large. Indeed, many huge hotels are undesirable as places of lengthy residence, and are lacking in that home feeling which is so eminently characteristic of a small establishment like the Hotel Clarence, which has only twelve bedrooms, but charming gardens with inviting chairs and tables, where the leisure hours after sundown can be most pleasantly spent. It has also an excellent tennis court. All the bedrooms are comfortably and suitably furnished and have

their own bathrooms and toilet arrangements. Some open on to the verandah on the upper floor and others direct on to the garden.

The Hotel Clarence is a branch of the business of Messrs. Harrison and Co., described on page 322; and that connection is an eloquent indication of the facilities and resources at the command of the management in regard to its daily menus.

Rundall Road, in which the hotel is situated, is in a quiet residential district within a comparatively short distance of the chief commercial centre of Madras.

THE MADRAS WAREHOUSE, Engineering Contractors and Automobile Engineers, Mount Road.

THE titles of business undertakings are not always accurate indices to the character of their trade. The Madras Warehouse, for instance, is suggestive of a general department store, but bears no relation thereto, for it is the name of one of the noteworthy industrial concerns in Madras. In the first place, the firm so designated are large engineering contractors, and have erected many important buildings, including Queen Mary's College for Women and numerous hospitals and institutions. Secondly, the firm, who are contractors to the Government and the railways, are amongst the leading local representatives of the motor trade, and in their works in Mount Road, equipped with an excellent plant of machinery, everything is executed that comes

within the scope of automobile engineering—body building, repairs, etc. The firm are agents for the celebrated Hudson and Essex cars and the Durant, Rugby, and Reo trucks. They are importers of motor accessories of every description, of which they always keep a good stock to meet public requirements.

The business, which was started in 1912, has developed very successfully, and gives employment to about 200 persons on an average. There is a branch of it at Bangalore. The proprietors are Messrs. A. K. Venkatarama Aiyer and A. K. Ramachandra Aiyer. The telegraphic address is "Contract," and the codes used are Bentley's and the A B C 5th edition.

G. A. NATESAN and CO., Booksellers, Printers, and Publishers, Sunkurama Chetty Street.

THE story of the inception and development of the business of Messrs. G. A. Natesan and Co. into one of the principal undertakings of the kind in Madras is the story of its worthy founder and proprietor, the Hon. Mr. G. A. Natesan, B.A., F.M.U., who, after finishing his journalistic apprenticeship with the *Madras Times*, to which he was a copious contributor, started operations on his own account as a printer and publisher in 1897. In the following year he published his first book, *Indian Politics*, which was a great success. In 1900 he started *The Indian Review*, a monthly miscellany of politics, literature, philosophy, and religion, which has since played a very prominent and influential part in Indian affairs. In 1925, on the completion of its 25th year, a Silver Jubilee edition of *The Indian Review* was published, to which the Right Hon. Ramsay Macdonald, Lord Hardinge, ex-Viceroy of India, Lords Pentland and Willingdon, ex-Governors of Madras, and a number of distinguished journalists and publicists like Messrs. Garvin, Nevison, and Lord Riddell, sent messages of greeting, eulogising the services of Mr. Natesan and *The Indian Review* to the cause of Indian progress. In honour of the occasion the public of Madras gave a public entertainment to Mr. Natesan.

Among the many successful books published by Mr. Natesan relating to Indian affairs is the notable work from his own pen *What India Wants*.

Mr. Natesan has also done great work as a politician, and is the Secretary of the Liberal League. He was one of the organisers of the Third National Liberal Federation held at Madras in 1922, and in that year was elected Joint General Secretary. He has taken a prominent and able part in all the movements in modern times for the welfare of Indians at home and abroad, and has given evidence on many important questions before Government and other Commissions. In 1910 he was elected to the Council of the Madras Corporation, to which he has been repeatedly returned with an overwhelming majority. In 1924 he was nominated by the Madras Government to a seat on the Council of State, and in August of the same year a public address was presented to him eulogising his Municipal career. An active member of the Senate of the Madras University, Mr. Natesan has been repeatedly elected to the Syndicate where his services have been untiring. In May, 1914, he was chosen with two others to represent the Madras University at the Universities Conference at South

G. E. SAMPATHU CHETTY and CO.,
Merchants, Commission Agents and Manufacturers' Representatives, 299, Esplanade.

THE Esplanade is one of the principal business thoroughfares in Madras, and No. 299 of it is very deceptive, so far as outward indications are concerned, regarding the importance of the business therein carried on. The reviewer of the city's commerce and industry, uninitiated in local conditions, and unfamiliar with the significance of the name over the entrance of the establishment in question, would not consider it worthy of notice or inquiry, and would doubtless be surprised to learn that the firm in possession, Messrs. G. E. Sampathu Chetty and Co., is one of the most noteworthy of its kind in India. In a business like that of Messrs. G. E. Sampathu Chetty and Co. there is no necessity for large premises and ornate display. That firm are known and respected throughout Southern India, where they have a large staff of travellers constantly "on the road" attending to the requirements of their numerous customers in that territory. They are always *en rapport* with the latest novelties and

improvements in all classes of goods as well as in standard articles that are famous to the ends of the earth, and the influence of their activities permeates practically all branches of local commerce and industry.

This noteworthy business was started in 1900 by Mr. G. E. Sampathu Chetty, its highly esteemed proprietor, whose success is certainly well deserved, for in all his activities he endeavours to exemplify "the little more and how much it is" in service and supplies. His telegraphic address is "Tapmas," Madras, and his codes are the A B C 4th and 5th editions and Bentley's. The list of his agencies is too long to be given here, but they include manufacturers of goods of almost every description.

Mr. G. E. Sampathu Chetty is assisted by two of his sons, Mr. G. S. Ramanujam Chetty, B.A., Dip. Econ., F.C.I., Birmingham, and Mr. G. S. Rangiah Chetty, F.C.I., Birmingham.

KLEIN and PEYERL,
Photographic Artists and Block Manufacturers, 11, Narasingapuram Street, Mount Road.

THE business of Messrs. Klein and Peyerl is one of the oldest of its kind in India. It was established in 1882 under the name of Wiele and Klein, and carried on as such until 1926 when the designation was changed to its present form. The firm's premises at 11, Narasingapuram Street, near the Hotel Bosotto, are well adapted for the various activities therein conducted. Messrs. Klein and Peyerl operate in all branches of photography, from exquisite miniatures to life-size enlargements, and their portraiture may well be classed amongst the fine arts, affording, as it does, a great contrast between its high quality and the prosaic productions of the ordinary photo-

grapher. They operate with the most up-to-date cameras and everything for the perfection and expedition of their work. They possess one of the largest collections of photographs of Southern India, and many of these, it will be noticed, are reproduced in the Madras section of this volume.

Messrs. Klein and Peyerl are also manufacturers of half-tone and line blocks for illustration purposes. The operations in all the departments are under the supervision of Mr. Peyerl, one of the partners, who is an expert with very many years' practical experience of the work which he demonstrates so well.

K. C. LOGANATHAN
Manufacturer of Pickles, Preserves, Condiments, etc., 16, Seven Wells Street.

INDIA has many kinds of food, but none more famous and popular than curry and rice. That excellent dish, as made there, is very different from the unattractive imitations of it served in most other countries, where the ingredients for its success as well as the knowledge of their compounding are of the most elementary character. For curry and rice as it is made in India there are many different condiments, all of which contribute to the piquancy and nutritive value of the dish. In this connection a firm famous for the manufacture of Indian condiments is that of Mr. K. C. Loganathan, who has been awarded no fewer than twenty gold and silver medals and diplomas for the high quality of his productions.

Amongst the industrial establishments which the writer inspected at Madras, none was more interesting than Mr. Loganathan's factory, where he saw in course of preparation the numerous pickles, preserves, pappadams, condiments, etc., for which that gentleman has become so well

known. In the busy section where the celebrated Loganathan curry powder was being made comely damsels manipulated with remarkable dexterity large pestles in mortars where the pungent appetising material was being pounded into the perfection that has gained for it a large demand everywhere.

The Loganathan products are held in high esteem especially in Great Britain, where people returning from India to the homeland are supplied with them through such well-known firms as Fortnum and Mason, Ltd., 181, Piccadilly, London, W., and T. W. Barber and Co., 2, Brewer Street, Regent Street, London, W. The manufactures in question are packed for shipment abroad in hermetically sealed tins, so that they keep in first rate condition indefinitely.

The business was established in 1879 by the present proprietor's father, who died in 1907; so that Mr. Loganathan has been engaged in it throughout his commercial career.

**VIJIAM and CO., Importers, Exporters, Manufacturers' Representatives and Commission Agents,
27, Thambu Chetty Street.**

MANY of the business places in Georgetown give little, if any, indication of the importance of the firms who are located there. This is particularly the case with No. 27, Thambu Chetty Street, where there is nothing to indicate the status and influence of the firm of Vijiam and Co., who have their offices on the upper floor of that building, which is their own property. The business of Messrs. Vijiam and Co. was started in 1897 in a very small way by its sole proprietor, Mr. C. Vijiam, who is one of the best-known Hindus in the commercial arena of Madras. The manner in which his business has developed, and the extensive connections he has formed, reflect very creditably on his ability.

Messrs. Vijiam and Co. are importers of merchandise of every description; but their principal lines are piece-goods, hardware, sundries, oilmen's stores, etc. They represent many English, German, and other Continental firms for iron,

steel, hardware, glass and enamelled wares, electric goods, heavy and light chemicals, sundries, etc., including Stanes and Co., Ltd.; The United Coffee Supply Co., Ltd., for tea and coffee, etc.; and Polack and Schwarz's Zaandam, for essences, essential oils, and aromatic chemicals.

For the more efficient organisation of his numerous departments, Mr. Vijiam has arranged his business activities into two other sections, viz., **R. J. VIJIAM and Co. (Mill Goods and Piece-Goods Department)**, 96, Godown Street, Madras, and

VIJIAM and SONS, Manufacturers' Representatives and Commission Agents, 2-36, Chickpet, Bangalore City.

These two sections are special indentors to the Buckingham and Carnatic Mills Co., Ltd., the Bangalore Woollen Mills Co., Ltd., and other mills and foreign piece-goods dealers.

**CURUNATH and CO.,
Furniture Manufacturers and Sanitary Engineers, 1/24, Murugappa Mudali Street.**

FURNITURE as the means of creative expression has always been of great interest to Mr. C. T. Parthasarathi Mudaliar; B.A., L.T., I.E.S. (Retired). In his young student days he learned how to make it in the Madras School of Arts, and during his subsequent career in the Government service his great hobby was the construction of all kinds of household articles of utility and ornamentation. Consequently, when he retired from his position as Inspector of Schools in 1924, he started in business under the title of Curunath and Co., Quality Cabinet Makers and Sanitary Engineers.

Any work that is loved for its own sake, and as a hobby rather than a task or necessity, is much

better calculated to be superior in every way than things made for sale at the greatest profit and without affectionate pride in their intrinsic worth. That is why Mr. Curunath's activities should be regarded as on a plane above the ordinary; and it is not surprising to find that his business is undergoing very satisfactory development. In his factory about sixty persons are employed in the production of woodwork and upholstery of every description, and he has received many testimonials regarding the high quality of his output. It may be added that Mr. C. T. Parthasarathi Mudaliar is an Honorary Magistrate of the Madras Presidency.

**GALLEY and CO., Government Auctioneers and Contractors,
Importers and Manufacturers' Representatives, 164, Broadway.**

THERE are many degrees of utility in business undertakings, but the one carried on by Messrs. Galley and Co. is in the front rank of the most useful, for its service and supplies cover a very wide range of necessity. As Government auctioneers, for instance, Messrs. Galley and Co. are called upon to conduct very important sales; and having been established since 1903, their long and intimate knowledge and experience of local conditions and values are of great advantage to them in that connection. As they state on their excellent calendars, which are to be seen throughout Madras, they "undertake to sell anything anywhere," and their ability in that respect is highly appreciated by banks for the disposal by auction of goods relating to dishonoured bills, etc.

Messrs. Galley and Co. operate also as Public Works Department contractors and supply all kinds of hardware and building materials. They are on the lists of District Boards, Railways, and

Municipalities as well as of Government. The firm are sole agents in Madras for the Danish Machine Co.'s lathes, shaping, planing, drilling and wood working machines, Emil Wessely steel safes, fire and burglar proof, and steel cash boxes, thief proof. They are sub-agents for Ruston Hornsby oil and steam engines, Ruston centrifugal pumps, "Glacia" ice-making machines, Douglas and Grant rice hullers, Gandy's belting, Pabco paints, etc., for the districts of Guntur, Nellore, Cudappah, Chittoor, North Arcot, and Madras City; and they have agencies at Guntur, Nellore, Chittoor, Vellore, and Thirupathi.

The founder and sole proprietor of the business is Mr. K. Galley, who commands the respect and confidence of every one with whom he has dealings. The firm's telegraphic address is "Galley," Madras, and they use the A B C code 5th edition.

K. K. IYENGAR and CO.,
Exporters, Importers, and Manufacturers' Representatives, 7, Phillips Road.

A VERY large proportion of the commerce of the world is created and sustained by the numerous firms operating as manufacturers' representatives in all the principal centres of trade. Amongst the most creditable of these in Madras are Messrs. K. K. Iyengar and Co., who handle merchandise of all kinds, but especially piece-goods, hardware, building materials, metals, machinery, and sundries, and represent some well-known British houses, including A. Barnett and Co., Coventry, manufacturers of the famous "Invicta" cycles, and the Norwich Union Life and Fire Insurance Society, Ltd.

The business of Messrs. K. K. Iyengar and Co. was established in 1919 by its sole proprietor, Mr. K. K. Iyengar, who is a graduate of the Madras University. Before commencing his commercial career he was a journalist, and acted as Madras correspondent to the *Times Supplement*, etc. The firm's telegraphic address is "Busy-bee," Madras, and the codes used by them are the A B C 5th and 6th editions, and Bentley's. They are agents for the following:

- A. Barnett & Co., Coventry, England; "Invicta" motor-cycles and cycles.
- The Raynal Manufacturing Co., Ltd., Birmingham; "Raynal" cycles and frames.
- Moore & Wright, Sheffield; saws and tools.
- Avia Tool & Steel Co., Ltd., Sheffield; high-class precision tools.
- S. A. Daniell, Ltd., Birmingham; engineering tools, machinery and hardware.

P. BALAKRISHNA MUDALIAR

Manufacturers' Representative, Distributer for LIPTON, LTD., 21, Second Line Beach.

LIPTON and tea have become synonymous, and there is no name more prominent and better known in that connection throughout the world. Messrs. Lipton, Ltd., have, besides their extensive plantations in Ceylon, other large tea lands in Assam, and from the latter is derived the tea that sustains their trade and reputation in India. In Madras the distributer for Messrs. Lipton, Ltd., is Mr. P. Balakrishna Mudaliar. When he was appointed their agent in 1918 the sale of Lipton's tea in Madras was about Rs. 15,000 per month. Through his enterprising activities it has now increased to Rs. 50,000 a month, which testifies eloquently, not only to his ability, but also to the high quality of the famous product. Mr. P. Balakrishna

Mudaliar is distributer also for the large variety of preserves and provisions of Messrs. Lipton, Ltd., and is an importer of paper, general stationery, liquors, French millinery, etc. Indeed, he acts as medium between buyers and sellers for goods of every description, and is also agent for W. V. Bowater and Sons, Paper Manufacturers, London; Ernest Pay Trading Co., Oslo, Norway; and Staedtler Pencils made in Nuremberg.

Mr. P. Balakrishna Mudaliar has been established in business on his own account in Madras since 1911. His telegraphic address is "Building," and his codes are the A B C 5th and 6th editions and Bentley's.

KATHIAWAR CYCLE and MOTOR CO., 9, Broadway.

In no city in India is the cycle trade better represented than in Madras, where one of the most noteworthy firms engaged in it is that of the Kathiawar Cycle and Motor Co. This company are direct importers and wholesale dealers in cycles and motor accessories of every description, and transact a considerable trade. They have their own special cycles, "Diamond," "K.C.M.," "Leela," and "Selecta," which are made for them in England, and have attained

well deserved popularity in Southern India. The firm are also agents for the Raynal cycles.

They started their business in 1917 at Bangalore, where they still operate under the name of the Mysore Cycle Trading Co. In 1924 they opened their present headquarters in Madras. The partners are Messrs. D. Z. Mehta and M. T. Shah. The firm's telegraphic address is "Busy," and the codes used by them are the A B C 5th and 6th editions, and Bentley's.

- Lockwood Brothers, Ltd., Sheffield; hardware, tools, cutlery and furniture fittings.
- Folger & Hause, Elberfeld, Germany; engineering tools, brass fittings, wire ropes, and hardware.
- Maltzahn & Springer, Berlin; machinery, electrical goods and hardware.
- S. A. Anciens Etablissements Renson, Waergem, Belgium; tower and other bolts, "T" hinges, etc.
- Technical Glass Co., Inc., U.S.A.; "Tegco" glass knobs.
- Spong & Co., Ltd., London; coffee mills, meat choppers, knife grinders, etc.
- Sandeman Varnish, Ltd., Glasgow; British varnishes and enamels.
- Govaneroit Pottery Co., Ltd., Glasgow; stoneware acid jars, covered jars, etc.
- A. R. Robertson & Co., Ltd., Glasgow; "So-Wo" cotton-hair beltings.
- G. Rothmund & Co., Hamburg; camel hair, cotton, balata and rubber leather beltings.
- Aug Renschel & Co., Sclotheim, Germany; hair and cotton beltings.
- International Galalith Gesellschaft Hoff & Co., Hamburg; "Galalith" articulus-combs, buttons and fancy articles, and raw "Galalith" in sheets, rods and tubes.
- Wilhelm Koreska, Vienna, Austria; typewriter ribbons, carbons, stencil and oil boards, duplicators, etc.
- Argus Manufacturing Co., Inc., U.S.A.; pen and pencil clips, etc.
- Porzellainfabrik Tiesch & Co., Altwasser, Germany; porcelain goods.
- H. & T. Kirby & Co., Ltd., London; aspirin tablets, patent medicines, and Kirby's specialities.
- Ho-Ro-Co Manufacturing Co., Inc., U.S.A.; "Ho-Ro-Co" tonic, healing oil, and toilet goods.

**R. VENKATESHWAR and CO., Ananda Press, Loane Square.
THOMPSON and CO., 33, Popham's Broadway, Printers, Stationers, and Publishers.**

THE development of printing and its allied activities is always an excellent barometer regarding other industries; and a brief consideration of the infinity of interests necessitating the utilisation of printed matter will emphatically show how absolutely indispensable the printer is to the welfare of a community. Amongst the largest and most capable representatives of the printing trade in Madras are Messrs. R. Venkateshwar and Co., who turn out excellent work and have built up an extensive connection throughout Southern India.

The essential printing requirements of the business man to-day are quality, economy, and service. Quality is a question of expert supervision, good material, and mechanical facilities. Messrs. R. Venkateshwar and Co.'s equipment is first rate in every respect and thoroughly adequate for their requirements. Economy is a matter of organisation, power, speed of machines and close buying of materials. The organisation of the Ananda Press, as their establishment is called, has been effected with the object of per-

fecting process and result, and the firm's extensive operations enable them to buy at the closest margin. The service they put at the disposal of their customers consists of trained men able to make and carry out suggestions for all kinds of high-class printing. With this organisation the firm supply work which achieves satisfactorily and profitably whatever objects may be in view. They operate with equal ability as general bookbinders, machine rulers, and in all the activities allied to the printing trade. They are publishers of vernacular school books, and are suppliers of stationery to the Governments of Cochin, Pudukotta, and Mysore States.

The business was established in 1891, and the partners are Rao Bahadur V. Ranganadham Chetty and V. A. Keshab Chandra. The telegraphic address is "Ananda."

In 1919 the firm purchased the printing, book-binding, and publishing business of Thompson and Co., 33, Popham's Broadway, and carry it on under that title.

PREMIER INDIAN SCIENTIFIC CO., 114, Armenian Street.

THE appearance of the premises of the Premier Indian Scientific Co. is not impressive, but that is of negligible importance in view of the wonderful work executed there. That work has a range which covers practically every department of science, and would certainly be regarded with unbounded interest and astonishment a decade or two ago before the invention of the many remarkable things that are now regarded as commonplace items in the company's stock.

The Premier Indian Scientific Co. are suppliers of scientific, physical, and chemical laboratory apparatus for schools, colleges, and industrial institutions, and are on the approved list of the Educational Department. They are agents for the

glassware of Schott and Jen-Jeena, Eydam and Krieger, Ilmenau, the balances of August Sauter, Ebingen, the microscopes of Car Zeiss Jeena, Leitz and Wetzlar, the porcelain of W. Haldenwanger, Spandau, and the physical and chemical apparatus of Baird and Tatlock, London.

The business was started in 1918 by Mr. A. V. Subramanian Chettiar, and under his capable direction has proved a very useful contributor to local facilities and resources. At the time of writing Mr. Chettiar is making arrangements for adding to his premises a laboratory with a thoroughly modern equipment, where students and others may pursue their studies or make scientific demonstrations and analyses.

**K. NAGESWARA RAO,
Proprietor of ANDHRAPATRIKA PRESS and the AMRUTANJAN DEPOT,
6 and 7, Thambu Chetty Street.**

PRINTING establishments are very numerous in Madras, but many of them are only very small, with the most limited resources, and carried on in places of the most negligible description. Not so the Andhrapatrika Press, which is one of the best native typographical undertakings in the city, and a credit to its worthy proprietor, Mr. K. Nageswara Rao, who started it about thirty years ago, and has met with well deserved success. In the Andhrapatrika Press are executed all kinds of printing, from visiting cards up to big posters and bulky volumes. In ordinary jobbing work the firm is noted for the general good quality of its output and moderate charges. Machine ruling, bookbinding, account-book manufacture, and the production of printing blocks for three-colour work are also carried on by the Andhrapatrika Press with commendable ability.

The business takes its name from the daily

and weekly newspaper *Andhrapatrika* which is printed there entirely in Telugu. Mr. Rao started that journal many years ago, and it has a very wide circulation in Southern India, while for its weekly edition there are subscribers in distant parts of the world.

Mr. Rao also owns the excellent monthly journal entitled *Bharati*, which in Telugu means "Goddess of Learning," and it too is printed on the premises.

Mr. Rao is the discoverer and owner of the famous balm known as Amrutanjan, which is declared to be a universal remedy for all the aches and pains to which mortal flesh is liable, and commands a large sale throughout India. The main office for the supply of this preparation is at Bombay, but it is procurable from chemists and druggists almost anywhere in the peninsula.

CHELLARAM GIANCHAND, Ladies' and Gentlemen's Outfitters, Silk, Curio and Carpet Merchants, Manufacturers of Silverware, Embroideries, and Real Madras Handkerchiefs, etc.,
86, Walajah Road and 9-10-11, Rattan Bazaar Road.

In every town there are one or two names that stand out more conspicuously than others for certain lines of service and supply. In Madras the name of Chellaram Gianchand is prominent and influential as the designation of the principal Indian business devoted not only to everything pertaining to the outfitting of ladies, gentlemen and children, but to the inexhaustible variety of goods associated more especially with India and its industries, such as piece-goods, jewellery, brassware, carpets, curios, etc. Very beautiful indeed are the silks supplied by this firm in all the colours of the rainbow, and affording an interesting and instructive object lesson in the many qualities and patterns in which that material is manufactured, not only in India, but also in China and Japan.

Messrs. Chellaram Gianchand have two establishments in Madras—the large glass-fronted one at 9-11, Rattan Bazaar Road, and "The White House," at 86, Walajah Road. The latter is the firm's headquarters, and a visit should be paid to either by everyone in the city desirous of obtaining serviceable and fashionable things for personal wear or beautiful and uncommon articles for gifts or mementoes of India.

"The White House" is very much larger than might be surmised from its outside appearance,

GANESH and CO., Publishers, Booksellers, and Coffee Merchants, 39, Thambu Chetty Street.

THERE is as much difference in books as in persons, and the world would be none the poorer if a vast proportion of the volumes issued every year were never produced. Similarly, there is a great difference in publishing firms in regard to the kind of literature they place on the market. Many are not actuated by lofty ideals, and disregard whether their books are uplifting or not so long as they are money makers. It is, therefore, pleasing to direct attention to the firm of Ganesh and Co., who are worthy of the highest commendation for the manner in which, as publishers and booksellers, they always provide a selection of great interest and utility. They specialise in

for behind it, and on its upper floors, are carried on many departments of highly skilled work, including the manufacture of exquisite embroideries for ladies' wear and exceptionally rich and handsome cloths with gold and silver insertions in charming and artistic designs of every description.

The despatching department, where may be seen neatly and strongly made up parcels addressed to all parts of the world, is eloquent of the extent of the firm's trade; but that will be better appreciated by mention of the fact that they have elsewhere in Madras a factory where about 300 persons are employed in the production of silverware, embroideries, etc.

The business was established in 1890 by Mr. Chellaram, who was succeeded after his death in 1922 by his sons, the present proprietors, Messrs. Hashmatrai and Kewalram. Year after year it has very successfully developed, and is now the principal undertaking of its kind in Southern India. Branches of it are established at Bombay, Hyderabad (Sind), and Ootacamund. The firm are favourably known everywhere as Chellaram, and have been awarded medals throughout the world for the excellence of their productions. Their telegraphic address is "Silver" and their codes are the A B C, 5th edition, and Bentley's.

Indian national literature, and their books are in demand throughout the world.

Messrs. Ganesh and Co. are also coffee merchants, and their well-known "Bison Head" brand of Coorg coffee is an excellent and appropriate beverage for leisurely consumption when perusing any of their volumes. They are local Agents for Messrs. Pierce, Leslie and Co., Ltd., coffee curers, who have their premises on the Malabar coast.

The business was established in 1905 by Mr. M. R. Ramaseshiar, who was joined in partnership in 1906 by Mr. S. Subbaiya. Their telegraphic address is "Ganeshco," Madras.

ENGLISH CYCLE and MOTOR IMPORTING CO., 9, Broadway.

It is pleasant to recall the time, not so very long ago, when the cycle was the swiftest means of transport on the roads of the world. Beginning with the velocipede and culminating in the present perfect product of experience, science, and ingenuity, the evolution through which the cycle has passed is one of the most interesting chapters in the history of locomotion. England has always held a leading position for the quality and quantity of its cycle output, and special interest attaches, therefore, to the English Cycle and Motor Importing Co., who, as might be inferred from their title, deal in English goods. They are agents, for instance, for the Rudge-Whitworth,

Sunbeam, Hercules, Pearl, and Ray cycles, and also for the Rudge-Whitworth and Sunbeam motor cycles. The firm keep in stock an excellent assortment of these high-class machines as well as accessories of every description, well calculated to meet the most diverse requirements.

The company started as wholesale dealers in cycles at Coconada about 1900; but, owing to the rapid development of their business, they removed to Madras, and have now a branch at Bezvada. Their telegraphic address is "Cycles," Madras, and the codes used by them are the A B C 5th edition and Bentley's.

ROMER DAN and CO., Importers of Motor Cars and Accessories, 217, Mount Road.

Not a few of the motor firms in Madras were started as cycle dealing concerns, and from small beginnings have undergone extensive development. It was as cycle merchants that Messrs. Romer Dan and Co. began their activities in 1908, and three years later turned their attention to the motor trade, in which they now occupy an important position in Madras. They are importers and distributors of all kinds of motor parts and accessories, and in their workshops in Mount Road repairs of every description are speedily executed by a staff of skilled workmen.

In 1925 Messrs. Romer Dan and Co. were appointed agents for the renowned Studebaker cars, which are the crowning achievement of seventy-seven years devoted to the building of transportation products. Of the fifty American cars being manufactured to-day only seven are given a power-rating by the Royal Automobile Club equal to that of the Studebaker Big Six,

and these seven cars cost from two to five times more. The Studebaker Standard Six is likewise unique in the power it offers, for it is rated the most powerful car of its size and weight in the world.

Studebaker was a pioneer in adopting the L-head type of engine, which 70 per cent. of American manufacturers now use. Its quietness, its efficiency, its freedom from trouble, and its long life have established its unquestioned superiority. Yet Studebaker has gone even further to ensure a smooth flow of power, for every Studebaker crankshaft is fully machined and dynamically and statically balanced, in order to reduce the engine vibration to an absolute minimum. Considering the quality of materials and workmanship which go into the Studebaker cars, it is not surprising that more than 900 Studebaker owners have reported that their cars have been driven from 100,000 to 300,000 miles and are still in operation.

SOLDEN and CO., Printers, Bookbinders, Stationers, etc., High Road, Triplicane.

In no trade in Madras is there greater competition than in printing, and the number of firms engaged therein is really very large in view of the comparatively small size of the city. Many of them, however, are small negligible concerns with the most elementary equipment, merely hand-to-mouth jobbers, whose work is of the crudest description. In contrast with these are Messrs. Solden and Co., who are one of the most noteworthy of the local Indian typographical firms, and have attained well-merited distinction for the excellence of their output. The demand for the highest quality of workmanship in modern printing continues unabatedly with the increasing complexity of mercantile, industrial, and social activities. Good taste and refinement are so obviously expressed

in printed displays that wisdom ever advocates their exemplification in things trivial as well as of greatest moment; while in the keen rush of business life maximum economy and utility are imperative in the multitudinous affairs of office stationery and requirements. Messrs. Solden and Co. are excellently adapted by their men and methods, as well as machinery, for demonstrating the most acceptable ideals in all printing needs, from a visiting card up to a large coloured poster.

The firm are also stereo and electro typers, bookbinders, gilders, photo engravers, rubber stamp manufacturers, stationers, cardboard box manufacturers, etc. Their business was established in 1902, and has developed so well that it now gives employment to about 100 persons.

THE GENERAL MEDICAL SUPPLIES, Chemists and Druggists, 177, China Bazaar Road.

In the earliest periods of the world's history of which there is any record the work of the pharmacist, like that of the perfumer, was practised by a special class of the priesthood. Egyptian inscriptions indicate that the physician priests, when visiting the sick, were accompanied by the charter of incantations and spells, and sent their prescriptions to be dispensed by the priests of Isis. It is a far cry between those ancient times of superstition and the enlightened days in which we live; and probably no department of commerce and industry stands for greater benefit to the human race than the modern pharmacy, with its comprehensive variety of everything that knowledge and experience have produced for the prevention and alleviation of pain and illness. Amongst the best establishments of that kind in Madras is the one carried on under the name of The General Medical Supplies at 177, China Bazaar Road, which is a reliable source of supply of everything associated with its trade. Its comprehensive range of pharmaceutical goods is

eloquent of the innumerable remedies that have been evolved for the amelioration of disordered physical conditions. The stock is imported direct from leading manufacturers in Europe and America, not in too great quantities, but just sufficient to ensure its absolute freshness and to meet the demands of the business, and an extensive trade is transacted by the firm amongst the planters in the Nilgiri Hills, etc.

All the dispensing is attended to personally by the proprietor of the business, Dr. C. K. Krishnamurti, L.M. and S., who established it in 1924; so that the utmost confidence may be placed on the accuracy of everything compounded there.

The firm's telegraphic address is "Chinje," Madras, and they are sole agents in the Madras Presidency, inclusive of Native State, for the Northwich Pharmacal Co., New York, the Indian European Corporation, Bombay, and Kerp & Co., Bombay.

THE MADRAS TYPE FOUNDRY, 150, Broadway.

No trade is more developed in Madras than that of printing, and the number of firms engaged therein is really astonishing. Consequently, it is not surprising to find there such an up-to-date business as that of The Madras Type Foundry, which is the largest of its kind in Southern India and indeed one of the best in the whole of the peninsula. The fact that it was started so long ago as 1850 is an indication of how firmly it is established as a very noteworthy contributor to local facilities and resources. In 1921 it was purchased by Mr. P. S. Udayar, who personally supervises all its work, in partnership with Mr. K. Munisawmy Reddiar. About forty persons are employed in the business, which is conducted with enterprise and ability in all its departments. The fine machinery equipment includes three type-casting machines by John Haddon and Co. and five others of the firm's own manufacture.

All kinds of English and vernacular types and borders and type-casting accessories are made in the Madras Type Foundry, and its productions are sent to all parts of India. A noteworthy fea-

ture is that copper alloy is used for its job types. Considerable resources are presented by the stock always kept in hand by the firm to meet all possible contingencies, together with all manner of compositors' requisites, such as cases, reglets, racks, sticks, and galleys. The Madras Type Foundry deals in printing and binding machines, John Kidd's inks and roller composition, brass rules, etc., and is the local sole agency for the "Agfa" numbering, dating, and type high machines, and the "K. Gebbers" wire-stitching, eyeletting, punching, and cardboard cutting machines.

A silver medal was awarded to the Madras Type Foundry by the Industrial Association of Madras in 1925 for the excellence of its output.

Mr. Udayar, who is a printing expert of long and extensive experience, has travelled much in India in connection with his business, which caters to the requirements of typographical firms near and far. The telegraphic address is "Printype," Madras, and the code used is Bentley's.

HALLER'S PHARMACY, 24, Broadway.

THERE are many places in Madras where patent medicines and drugs and chemicals are obtainable, but a large number of them are by their appearance not calculated to attract or enhance the confidence of the public. Haller's Pharmacy, however, at 24, Broadway, is not amongst these nondescript places; but is one of the oldest, best known, and most commendable undertakings of its kind in the city. It was founded many years ago by the late Dr. W. H. Haller, who, after a distinguished career in the Government service of India and the Straits Settlements, settled down in practice in Madras, where he was already well known and esteemed.

Since his death in 1919 the business has been carried on by his widow aided by able managers and assistants, many of whom have been in the business for a long time. Haller's Pharmacy is

distinguished by its exclusive specialisation in the pharmaceutical trade, and does not include in its stock the toilet articles and perfumery usually associated with chemists' and druggists' establishments. Particular attention is devoted to the dispensing department, which is in charge of a qualified expert of long experience; so that the utmost reliance may be placed on the accuracy of everything compounded there. Haller's Pharmacy is the local agency for the celebrated pharmaceutical products of Messrs. Parke, Davis and Co., and Oppenheimer and Co., of London, and its comprehensive stock of things for the prevention and alleviation of pain and illness includes a number of preparations invented by Dr. Haller, which are in popular demand for their efficacy.

V. R. KAMATH and CO., Cabinet-makers and Upholsterers, 191, Mount Road.

THE primary purpose of furniture is utility; but as circumstances improve and the vision enlarges there is evolved from the elemental necessities the desire for corresponding expression of art in the equipment of the home. The infinity in which art in that connection is possible is demonstrated in some measure very pleasingly by Messrs. V. R. Kamath and Co., whose productions are of the most varied character, ranging from those of the simplest kind to things of wonderful beauty embodying wood carving and upholstery in the most charming designs, and well calculated to captivate those about to furnish or replenish a home. A point worthy of special note is that all the firm's manufacturing operations are conducted entirely by hand, and not by machinery; so that the fine workmanship seen in the handsome suites and single pieces are much more interesting than and superior to machine-made goods that are produced

without the affectionate pride of the artisan in his labour and sold without sentiment at the greatest possible profit. Messrs. V. R. Kamath and Co.'s services are well taken advantage of for all kinds of office and shop fittings and general wood-working requirements. Their premises are much larger than is indicated by their external appearance, and in the showroom on the upper floor and elsewhere may be seen many choice things that cannot fail to elicit the admiration of people able to differentiate between inferiority and superiority in furniture and appreciate the art and utility embodied in the firm's productions.

The business was established in 1908 by Mr. P. W. Kamath, its sole proprietor, and gives employment to a regular staff of about sixty persons, supplemented by many more as occasion requires.

SEAPORTS OF INDIA AND CEYLON.

HARRISON and CO., Manufacturing Confectioners, Bread and Biscuit Makers, Caterers, The City Restaurant, 168, Broadway.

THE business of Messrs. Harrison and Co. is the principal one of its kind in Madras, and since its commencement in 1891 has contributed an important and highly appreciated part to local amenities. Their premises occupy a large plot of land in Broadway, and the front portion forms The City Restaurant, where is displayed an attractive variety of the delicious confectionery and sweetmeats of all kinds made by the firm in their bakery behind. There is practically no limit to the charming designs in which Messrs. Harrison and Co.'s confectionery is produced from the finest ingredient by experts of long experience. The firm make a speciality of cakes for weddings, birthdays, and other festive occasions, and their beautiful productions of that kind have graced many memorable events in Madras and other parts of India. The firm pack their cakes in such a manner that they arrive at their destinations, including England, absolutely uninjured and in the finest and freshest condition.

As caterers, Messrs. Harrison and Co. are in a position to undertake functions of any description and magnitude either locally or in the mofussil, and they will be pleased to send esti-

mates and specimen menus for banquets, balls, suppers, dinners, receptions, picnics, shooting parties, tournaments, and sports at inclusive rates for servants and all necessaries. For many years the firm have been entrusted with the catering for the most important functions in the Presidency in connection with successive Governors, Rajahs, and the nobility, and stand in very high regard for the satisfactory manner in which all their work is performed.

The City Restaurant is popular for the excellence and moderate charges of the meals procurable there at short notice as well as for the light refreshments and ices also served from 8 a.m. till 11 p.m. daily, Sundays included. An excellent orchestra plays there on Wednesday and Saturday evenings.

The proprietor of the business is Rao Sahib G. V. Varadarajuloo Chetty, who established it about a quarter of a century ago. He is a highly esteemed philanthropist, acts as trustee for a number of charities, and maintains choultries at Conjeevaram, Sri Perumbudur, and Aiyavaram. He is also the owner of the Hotel Clarence described on page 314.

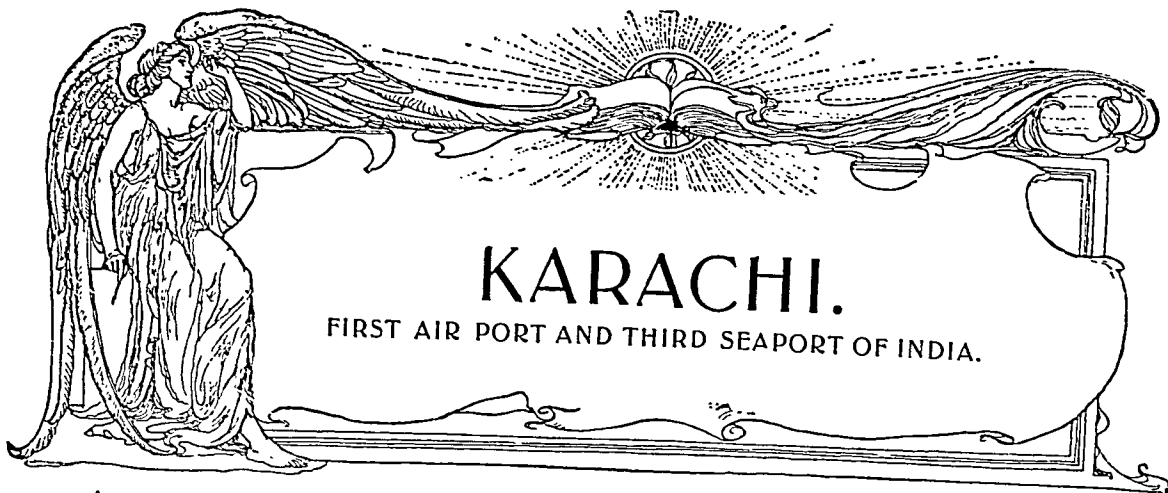
SMITH and SON, Tailors and Outfitters, Manufacturers of Boots, Shoes, and Leather Goods; Chemists and Druggists, Furniture Dealers and Manufacturers, Dry Cleaners, etc., 163, Mount Road.

THE business carried on under the name of Smith and Son is an extraordinary combination of many activities, and has no duplicate in Madras, for the uncommon individuality of its proprietor, Mr. E. D. Smith, permeates all its ramifications, and gives it a very unique and interesting character. The premises in which the business is conducted give from the outside no idea at all of their many departments of service and supply. The front portion is devoted chiefly to gentlemen's tailoring and outfitting, and in that section may be found the latest fashions and novelties in everything pertaining to a gentleman's wardrobe, including many specialities for tropical wear. If there is anything of which Mr. Smith, who founded the business in 1897, is particularly proud, it is his sartorial knowledge and ability, which he has been exercising for upwards of fifty years. He attends personally to all the cutting, and employs a staff of highly skilled tailors for the completion of the orders, which embrace suits and garments for all occasions.

Other departments of Mr. Smith's business are devoted to the manufacture of boots and shoes, bags, trunks, saddles, harness, and leather goods of every description.

In 1920 he took over the business of Collingwood and Co., chemists and druggists, who had been established for seventy years, and now runs that concern as one of his departments. The important work of making up doctors' prescriptions and general dispensing is attended to by a qualified man of thirty years' experience.

Mr. Smith is also a dealer in and manufacturer of furniture, is always on the lookout for goods of all kinds, is a vendor of antiques, runs a dry embracing dry cleaning, supplies and makes fancy-dress costumes, does also ladies' hair and many other things. Indeed, there are no limit to his enterprising activities. His employment to about forty persons, and his graphic address is "Collingwood," Madras.



Approach by Railway.



THE traveller to Karachi by the North Western Railway system finds the journey from Lahore, Sukker, or Hyderabad very unsatisfying so far as scenery is concerned. The train usually travels at top speed along a track which is geographically the limits of the Indus Delta, and on either side of the carriage there is little to be seen beyond vast barren stretches of desert land, occasionally rocky in places, but always devoid of vegetation other than a few withering cactus bushes. Here and there primitive villages are visible, while the ubiquitous camel may be constantly seen throughout the journey after the train leaves Sukker and enters into what may be termed "Sind Proper." The country is intersected here and there with large water-courses, all bone dry except during, perhaps, one week in the whole twelve months, for one of the drawbacks of the province is its insufficient rainfall. After leaving Hyderabad, about 113 miles from Karachi by rail, the train arrives at Drigh Road, some three and a half hours later, and here the traveller by railway obtains his first glimpse of Karachi Air Port, which is the headquarters of the Royal Air Force and the centre of civil aviation in India at present. At that potential place are large numbers of attractive-looking bungalows with red-tiled roofs and neat gardens at the front and rear, numerous barracks and "messes" accommodating nearly a thousand officers and men of the Royal Air Force, and several massive "hangars" which are very conspicuous with their brilliant red and white striped roofs. The largest airship shed in the world stands out as a gigantic steel grey structure towering over everything else, and defining the centre, more or less, of Karachi's civil aerodrome. All trains halt at Drigh Road Station for three or four minutes, during which a mental picture may

be taken of the interesting scene before speeding on to Karachi, another five minutes' journey. Within a mile and a half of Karachi Cantonment Station the Wireless Station comes into view, with its mass of poles and wires near a group of red-roofed bungalows. Then the top of Frere Hall, Holy Trinity Church, St. Patrick's Church, the Empress Market and other fine buildings gradually appear as the train speeds on towards the Cantonment Station, which is in keeping with its surroundings, bare, devoid of ornamentation and uninviting. Outside the station only a few uninteresting bungalows, the tramway terminus, and small Indian shops can be seen, nothing to stimulate the enthusiasm of a visitor certainly. The City Station is another three miles farther on, but the majority of people coming by train to Karachi alight at the Cantonment Station, the one nearest the European residential quarter (i.e. the Cantonment).

Approach by Road.

The traveller who elects to visit Karachi by road can do so from Las Bela or Sonmiani, in Baluchistan. Emerging from the Mangho Pir Hills to the north, the view of Karachi is very impressive. The city and port can be clearly seen, and the green countryside of the Lyari Valley beyond Cincinnatus Town adds a touch of vigorous colour to the perspective. On the right is Karachi Harbour with, perhaps, a hundred or more shipping masts and funnels visible, while stretching away in every direction is a mass of roofs, towers, and domes. The tall factory chimneys of the Sind Flour Mills stand out as emblems of one of Karachi's successful industries, relieved on all sides by dwellings and other buildings.

Approach by Sea.

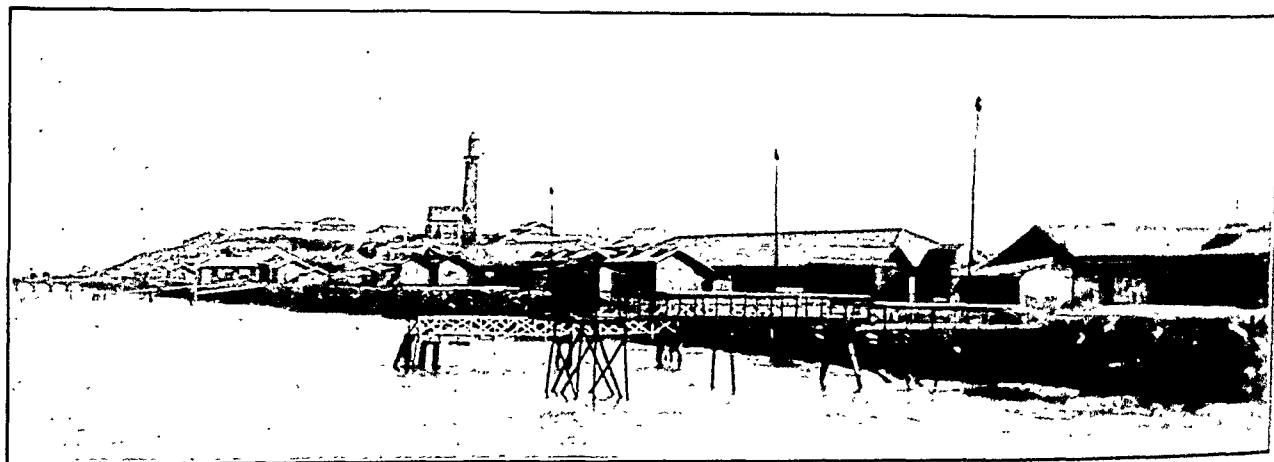
The best and most impressive view of Karachi, however, is that obtained by approach from the Persian Gulf. As the steamer nears Karachi Harbour the Hub Hills to the west and north become visible first. Then Manora Lighthouse comes into view. The rocky headland on which it stands is a cantonment occupied by the Royal Garrison Artillery in charge of the harbour defences. Manora is a self-contained little place with its own church (St. Paul's, consecrated in 1865),

school, library, tennis courts, etc. The tomb of a wonder-working Pir, who was buried in Manora, attracts crowds to an annual fair, and Hinduism is also represented by a conspicuous but not ancient temple.

Entering the harbour a fine panorama of Karachi City and suburbs greets the eye. On the east is the health resort of Clifton, referred to later. The shipping wharves can also be seen, as well as a faint glimpse of the business quarter of Karachi in the distance. Near the mainland Baba and Bhit Islands are visible, and just outside the harbour the Oyster Rocks (famous for picnics and fishing) relieve the bareness of the sea in that direction. An excellent view is also obtainable of the Karachi Harbour Extension works, known as the West Wharf Scheme, where a series of new and up-to-date shipping wharves are under construction. Stretching away in the distance is Shark Island, Sandspit and Maurypur Salt Works.

History.

In order to appreciate the importance and up-to-date character of the City and Port of Karachi it is necessary to know, briefly, what little history there is concerning its genesis, although strictly speaking Karachi has no history at all—in the same sense that Calcutta, Bombay and other seaports in India have. The British occupation of Karachi was the result of military operations in the Afghan War of 1838. At that time Sind, the great hinterland of Karachi, of approximately the same area as England and Wales, was subordinate to Kabul, to which kingdom it had been presented in 1756 by the Moghul Court. The Talpur rulers were then in power, but were so incompetent of maintaining peace and order that Sir John (afterwards Lord) Keane, the Commander-in-Chief of the Bombay Presidency, was ordered by Lord Auckland, the then Viceroy, to send an armed force into Sind. An expedition was accordingly



[Photo: R. Judd]

MANORA AND LIGHTHOUSE, KARACHI.

That almost completes the picture of Karachi which will greet the visitor by sea, whether from Bombay or the Persian Gulf.

Approach by Air.

What does Karachi look like from the air? On a clear day the approach to Karachi by aeroplane reveals a wonderful panorama. The cantonment and city appear to have been regularly and neatly laid out, while the harbour and shipping wharves look like a tiny model. At cloud level no sign of human life is visible, and so the visitor to Karachi by air might well be gazing upon a model of the city and port in an engineer's workshop. What is very noticeable from the air, however, is the many miles of water frontage and open spaces that could be utilised for development and expansion if and when the demand enforces it. Nature has been extremely generous to Karachi in many ways, not the least in her remarkable geographical position at the mouth of the Persian Gulf. The aerial traveller will pass over Karachi City and Cantonment to the Air Port at Drigh Road, and eventually alight close to the Airship Shed and mooring mast amidst surroundings already referred to.

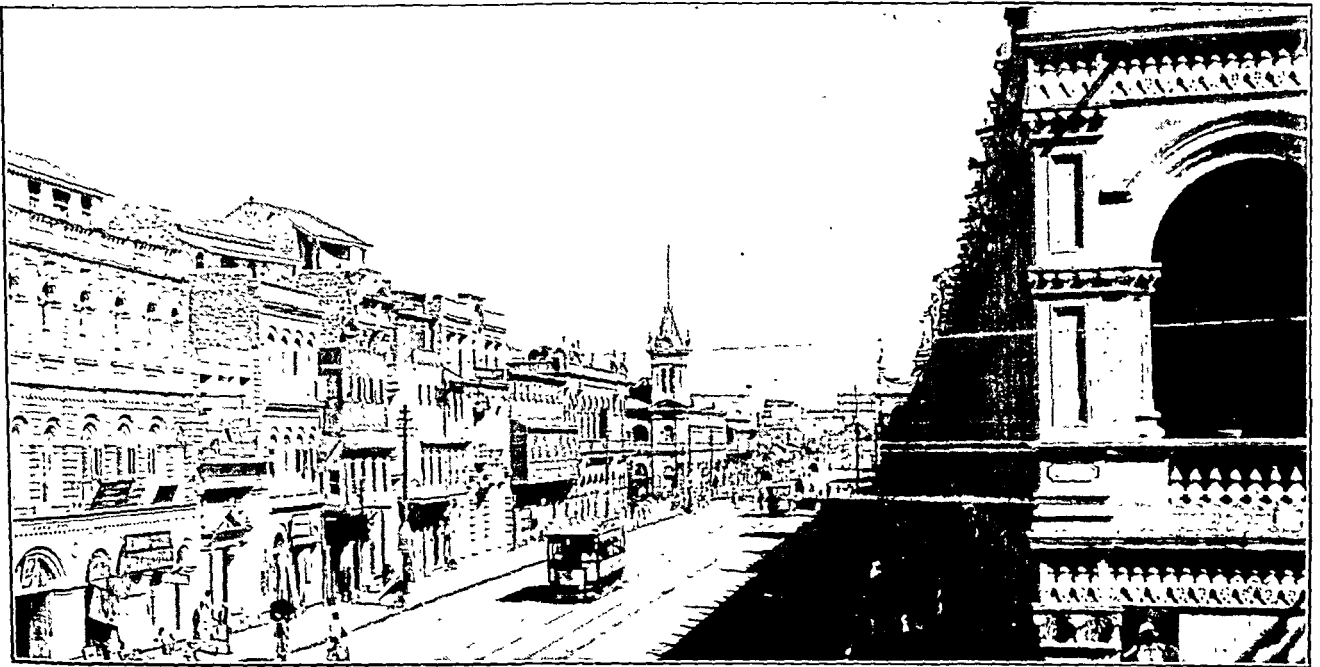
formed consisting of H.M.S. *Wellesley*, the flagship of Rear Admiral Sir Frederick Maitland, the transport *Hannah*, and one of the East India Company steamers, together with a number of country boats. H.M.S. *Algerine* and *Constance* joined the expedition at Hujamro, fifty-one miles east of Karachi, at one of the several mouths of the River Indus. The expedition anchored off Manora, the small rocky island at the entrance to Karachi Harbour, on February 1st, 1839, and two days later the fortress on the island surrendered without resistance as a shot being fired. The treaty with the Amir of Hyderabad, then the capital of Sind, was signed on February 5th, 1839, although it was not formally signed until some months later.

Early in 1842 Sir Charles Napier was appointed to command the territories bordering the lower Indus. At that time Sind was an independent kingdom, and negotiations were in progress for a treaty under which Karachi and four other ports on the banks of the River Indus were to be ceded in perpetuity to the British. Before negotiations could be completed, however, military operations commenced. The Amir Ali Murad was defeated

conflict with his brother, the Amir Rustam, for the conquest of Upper Sind, with the result that the latter, finding himself overpowered, fled for protection to a fortress in the heart of the Thar Desert. Sir Charles Napier followed him with a division consisting of 50 cavalry, 350 mounted European troops on camels, and two 24-pounder howitzer guns. Within twenty-four hours the fortress was a mass of ruins, and Sir Charles Napier's troops returned to headquarters in triumph without sustaining the loss of a single man. On February 1st, 1843, the Residency at Hyderabad (Sind) was stormed by 8,000 of the Amir's troops, a force that proved too powerful for Major Outram and his escort, who were driven out after a few hours' hard fighting. On Major Outram's return to headquarters (at Hala) Sir

increased new markets and new industries were established.

Sir William Napier in his *Life of Charles James Napier* says of his famous brother that "he reorganised and conducted the whole civil, political, and social affairs of the conquered people as well as the military government of his army, his subordinates being young officers selected by himself. He abolished slavery, upholding the equality of all men before the law. He put an entire stop to *suttees*, and vigorously suppressed the general practices of infanticide and the murder of women. He changed the military tenures of the great sirdars, turned their vassals into tenantry, and exchanged their quotas of warriors with sword and shield, due to the sovereign power for war, into quotas of labourers with mattock and spade for



BUNDER ROAD, KARACHI.

[Photo: I. Sequeira.]

Charles Napier collected a force of 2,800 men with artillery and marched on to Meanee, where the army of the Amirs awaited him with 22,000 fighting men. The historic battle of Meanee was fought on February 17th, 1843, in the course of which the Amir lost 5,000 men and the British about 250. On February 24th there was another battle at Nareja, in the district of Dabo, from which Sir Charles Napier's forces again emerged victorious. By the two battles mentioned Sind was conquered by the British.

Sir Charles Napier was the first British Governor of Sind, and the province was divided into districts. Sir Charles reorganised the revenue and other departments, and inaugurated many schemes of reform and progress, among the latter being the development of harbour works at Karachi.

The construction of the North Western Railway linked the rich wheat-fields of the Punjab with Karachi, the port of export, and as cultivation

public works; he abolished *corvées*, caused labourers to be justly paid, and effected all those great social changes without causing discontent. . . . He formed a body of police on an admirable system. . . . He constructed public works of gigantic size and utility with a marvellous economy. He opened hundreds of miles of canals, and projected greater works and greater extent of irrigation, but was stopped by the supreme Government. He raised Kurrachee from a village to a great city."

Napier's military and political achievements were important and far-reaching. Arnold Wright in his history of Sind says that he was the first to institute a force mounted on camels—a "camelry," which immediately justified itself by the brilliant results it achieved. On the political side the intimate relations he established with the Beluchi tribes laid the foundation of British supremacy on the North-Western frontier. When

SEAPORTS OF INDIA AND CEYLON.

Napier returned to England in the latter part of 1847 he had to his record one of the most successful examples of empire-building which up to that time had been provided. Yet he was the victim of extraordinary vilification at the hands of a jealous faction in India and an important but ill-

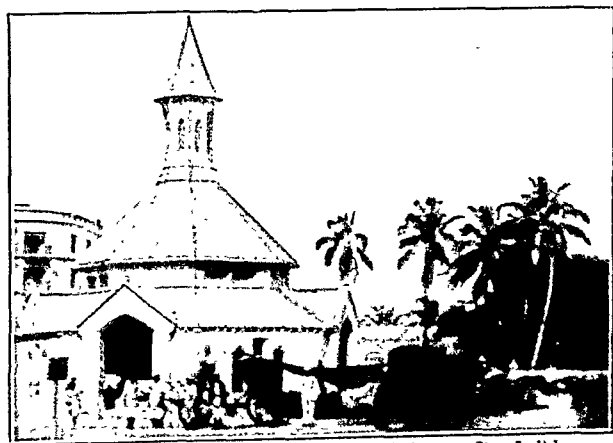


[Photo: Gupta and Co.]

BOULTON MARKET, KARACHI.

informed section of the public at home. That he was always discreet or wise in his actions his best friends will not claim. But that he was one of the greatest soldiers and administrators British India has produced, and that his conquest of Sind was an extraordinary example of that combination of military and civil genius which is so rarely seen, is to-day beyond cavil.

Sind was happy in finding, as Sir Charles Napier's successor, the brilliant Bartle Frere, whose governorship of Bombay was so memorable, and whose later connection with South Africa produced such striking results in the sphere of British politics. Frere laboured unweariedly, says Arnold Wright, to complete the administrative edifice which Napier had so well begun.



[Photo: R. Jalbhoy.]

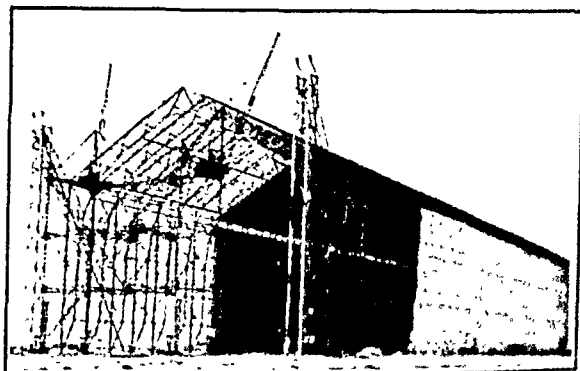
LAMBERT MARKET, KARACHI.

His proceedings were sometimes challenged by higher authority, but he was able as a rule to vindicate his measures in the light of the peculiar needs of the province. Sir Wm. Merewether, another able official, followed Sir Bartle Frere, and under his guidance and that of successors trained in the same good school of Bombay officialdom, Sind became one of the most peaceful, prosperous, and contented parts of India. Its

future bids fair to be even more brilliantly successful than Napier conceived in his wildest imaginings. Karachi, marked out by Nature to be the great port for Northern India, is rapidly developing. The Great War has enormously facilitated its progress. The opening up of Mesopotamia and the convention with Persia are giving enormous fillips to its expansion by their influences. Lastly, there is the factor of aerial navigation. In the near future, when aerial routes have been opened up throughout the world, Karachi will be one of the key positions, and the whole of Sind will share in the advantages which it will possess as the nearest Indian aerial station to Europe.

Karachi Air Port.

In 1924, when the British Government decided to proceed with the construction of two large airships, each of 5,000,000 cubic feet capacity, the necessity arose for the provision of suitable ground works to render the operations of the airships possible. The places chosen for that

**KARACHI AIRSHIP SHED.**

(Reproduced by permission of the Air Ministry and showing the great building nearing completion.)

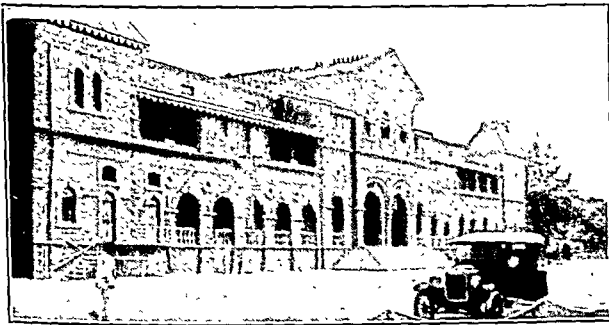
purpose were Cordington, near Bradford, Ismailia, at the Red Sea end of the Suez Canal, and Karachi, provision being made for a total expenditure at these three places of £500,000 in the connection indicated.

A sum of close on £100,000 has been devoted by the Government during the current year for the development of the Cairo-Karachi air route, and a new agreement has been made with Imperial Airways for a regular service by means of which the busy man may find himself in Delhi in a little more than a week after leaving Croydon.

Imperial Airways have the magnificent record of covering a distance of two and a half thousand miles in three years without any accident involving injury to a single passenger. The value of goods imported by air increased by 100 per cent. last year, and as many as 1,000 passengers landed at and left Croydon in a single week in July, 1925. By steadily discarding old types of machines in favour of new ones, the running cost of the fleet, which were originally 4s. 2d. per hour, has been reduced to 1s. 10d. It is not surprising that

fore, to learn that Imperial Airways are within measurable distance of becoming entirely self-supporting. The opening of the regular air route to India is not only the realisation of a dream that twenty years ago would have seemed every whit as fantastic as any tale of magic carpet or invention of Jules Verne; it is the first-fruits of a far-reaching policy which aims at securing physical unity between all parts of the British Empire. The advantages of being in close, continuous, and immediate touch, particularly with India, are of overwhelming importance. The motor, the railway, and the steamship have made all Europe easily accessible, but it has been left for the aeroplane to establish that contact with the East which, it is earnestly to be hoped, will speedily result in a better understanding between East and West.

The Karachi airship shed is the largest structure of its kind in the British Empire, and one of the largest single buildings in the world. It is 850 feet long, has a clear width inside of about 200 feet (180 feet at the doors), and a clear height



[Photo: Gupta and Co.]

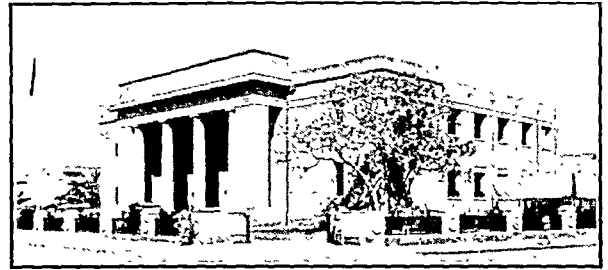
KARACHI RAILWAY STATION.

at the centre of 170 feet. There are sliding doors at the east end and a blank wall at the west end. The shed is capable of being taken down, if necessary, and erected elsewhere, through the restriction of the pieces to be assembled to a maximum weight of 12 tons and the employment of turned bolts for uniting them. Numerous gangways, runways, access staircases, etc., are provided, and workshops are arranged along one side. The shed was built by the Armstrong Construction Co., Ltd., a subsidiary of Sir W. G. Armstrong, Whitworth and Co., Ltd., London, etc.

In the 1927-28 edition of that excellent publication, *The Karachi Handbook and Directory*, one of the best of its kind in the Orient, Karachi as an air port is admirably dealt with, and from it the following information in that connection has been taken.

The selection of Karachi by Government as the Aircraft Depôt of the Royal Air force of India, the Airship Base for the coming Imperial Airship Service from England, and the chief aerodrome and air port of Western India, was based on considerations of both climate and geography. Karachi's position on the sea-board, nearer to the headquarters of the British Navy than any other

Indian port, its easy accessibility by air without the necessity of crossing high mountain ranges, its location roughly half way between England and Australia by the shortest route, and its propinquity to the summer and winter capitals of India on the one hand, and to London and the chief capitals of Europe on the other, give it advantages



[Photo: R. Jalbhoy.]

NEW CHAMBER OF COMMERCE BUILDING, KARACHI.

that, from an air point of view, are unapproached by any other port in India. When, in addition, both harbour and climate offer every attraction that seaplane, aeroplane, and airship could possibly require, then the selection of Karachi as India's chief air port became inevitable. Not only is Karachi free from those violent storms and torrential deluges that ordinarily accompany the south-west monsoon on its arrival at the western coast of India in lower latitudes, but atmospheric conditions generally at Karachi are comparatively calm, clear and equable for most of the year. An occasional dust storm at the change of the seasons in October, and with the arrival of the cold-weather rains from Persia and the Caucasus in January or February, is the worst that is ordi-



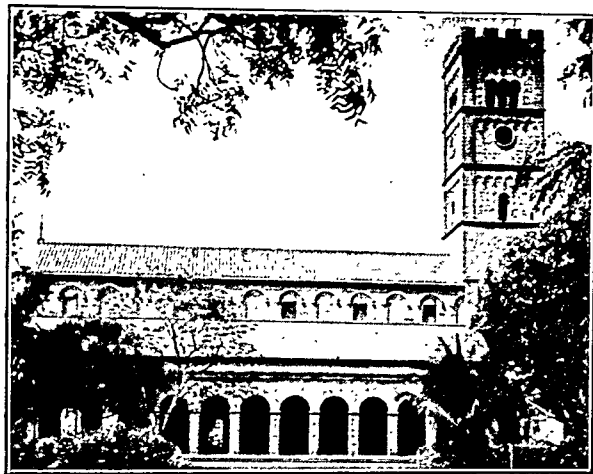
[Photo: Gupta and Co.]

EMPRESS MARKET, KARACHI.

narly likely to occur; whilst the temperature—varying from about 60 degrees Fahrenheit in January to 86 to 88 in the middle of the hot weather—is such that any European can enjoy and work in energetically all the year round. What more could any air port possibly offer to the coming air services of India, the Empire, and the world!

The first aeroplane ever seen at Karachi was a Handley-Page bi-plane (said to be the very

machine that had been designed for bombing Berlin), that afterwards flew from England to Egypt and took part in the victorious operations in Palestine. This aeroplane arrived at Karachi on the afternoon of December 10, 1918, and landed, to the amazement of the population of Karachi, most of whom trooped to the spot, on the flat



[Photo: R. Jalbhoy.]

HOLY TRINITY CHURCH, KARACHI.
The first Protestant Church built in Sind;
it was consecrated in 1855, and stands in a
compound of fifteen acres.

ground on the west of the Mugger Pir Road, between the Municipal Sewage Farm and the nearest spur of the Mugger Pir Hills. The machine was piloted by Captain Ross Smith (afterwards Sir Ross Smith, K.B.E., the hero of the first flight to Australia), and it carried also Major General (now Air Vice-Marshal Sir Geoffrey) Salmond, K.C.M.G., C.B., D.S.O., Brigadier General Borton, and two air mechanics.

Since that memorable occasion, aeroplanes from West and East from the chief nations of the world have passed through India and landed at Karachi air port. Several celebrated airmen from England, including Air Vice-Marshal Sir Sefton Brancker, Air Vice-Marshal Sir Geoffrey Salmond, Sir Alan Cobham, have come and gone. So also the French "ace" Captain Pelletier D'Oisy; the Dutchman, Van der Hoop; the Portuguese, Major Brito-Pais, Major Samento Beir, and Lieut. Manuel Gouveia; the Argentine pilot, Major Zanni; the Italian airman, Marchesa de Pinedo (in his Savoia seaplane); the U.S.A. Air Force Leaders First Lieutenants Lowell H. Smith, L. Arnold, L. Wade, H. Ogden, E. Nelson, and Second Lieut. Harding; also the Secretary of State for Air, Sir Samuel Hoare, Lady Hoare and party and Messrs. T. Neville Stack and B. S. Leete in their "Moth" aeroplanes.

At the Aircraft Depot of India, located close to Drigh Road railway station, technical stores from the United Kingdom and elsewhere are received and stored, aeroplanes are manufactured, and repairs of all kinds and any magnitude are carried out in the course of every day's work. A large technical establishment, including highly

skilled engineers and artificers, is kept constantly employed. All the necessary workshops, stores, and quarters for staff of all ranks have been constructed. The Aircraft Depot is linked to Karachi by road (*via* the New Jail, or the Sudder Bazaar, or Napier Lines) and to the main line of the North Western State Railway at Drigh Road.

Until the beginning of 1927 the Royal Air Force suburb at Drigh Road, together with the Civil Aerodrome and Airship shed now being completed on the north side of the railway some three-quarters of a mile beyond Drigh Road Station, were generally both referred to as "Drigh Road." But this nomenclature being obviously inadequate to the great developments now in progress, the *Daily Gazette* suggested successfully that the whole locality should thenceforth be known as "KARACHI AIR PORT."

The original strength of the Aircraft Depot on its inception at Karachi in 1921 was 250. The number has now risen to approximately 800 officers and men—Europeans. There are in addition at Drigh Road some 142 Indians engaged in the mechanical section of the aircraft workshops. The Depot is supplied with drinking water by a special main taking off from the Malir-Karachi Municipal Conduit east of the Drigh Road Hills, and delivering into the R.A.F. reservoir. The Depot uses its own electric current from its own power house. Several exclusive playing and sports grounds have been provided for the recreation of the R.A.F. establishment at Drigh Road.

In addition to the Aircraft Depot, the Government of India have under preparation an aeroplane and airship base about a mile farther on, and on the north side of the Karachi, Drigh-Malir main road.



[Photo: Gupta and Co.]

CAMEL TRANSPORT AT KARACHI.

Some little distance to the north of the western end of the airship shed is the site of the airship mooring tower. The British Air Ministry's original plans comprised four airship masts, but it is improbable that more than one will be constructed at first. The tower is octagonal in shape, and about 202 feet in height. Near the top are two platforms around the tower—the lower one for general look-out purposes, and the upper one for those concerned with the great searchlight or electric beam. There are central lifts for passen-

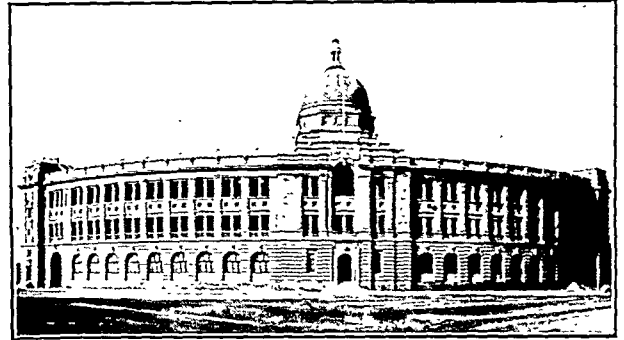
gers and others who will enter the airship (which will ordinarily be moored to the tower, just as a steamer is moored to a buoy in the harbour, swinging according to the direction of the wind, and tide), from a compartment above the passenger platform and by way of the nose of the airship. Passengers and luggage will be disembarked in the same way.

Ordinarily, an airship when in air port, will always float at her mooring tower, and will never be brought into the airshed (just as a steamer is never brought into dry dock) except for repairs or alterations that cannot be carried out at the mooring tower.

The two huge airships that are now being built to the order of the British Government will, it is believed, be able to cross the border line between running at a loss and running at a profit, with a comfortable margin to spare. These vessels will in truth be liners of the air. Each vessel is the size of the *Mauretania* and will have accommodation for 100 passengers. Every comfort to which the modern world is accustomed will be provided. Passengers will have large and comfortable cabins, restaurants to seat fifty people at a time will be provided, in addition to smoking lounges and decks specially strengthened to allow dancing.

As soon as these vessels have been tested the Government contemplate the subsequent commercial development taking place under the direction of commercial companies. It may be that, in order to obtain a speedy start and to secure for the British Empire that same ascendancy in air transport as it is at present enjoyed in sea transport, the commercial pioneers will be encouraged and assisted by Government subsidies for the first few years. In so doing the British Government will only be following a precedent established many

feeder aeroplane routes, linking up every town and province to these main transport arteries. The world will shrink in size as compared to a hundred years ago, to the equivalent of a globe of which the diameter is equal to the distance between London and Aberdeen. In the days of our grandfathers it took one week to go from London to Aberdeen, but our generation will go from London to Melbourne in the same time!"



KARACHI PORT TRUST OFFICES.
Completed in 1915 at a total cost of Rs.9,74 990.

Seaport of Karachi.

Since Government has recognised the unique geographical position of Karachi as an outlet for the whole of the surplus produce of the Punjab and the adjacent territories, as a gateway to the frontiers of India and Afghanistan, as the nearest Indian port to Europe, and as an important base for trade and defence in the Persian Gulf, the capital expenditure upon the development of Karachi Harbour and the provision of great irrigation schemes in the hinterland has been readily forthcoming. Karachi is less expensive as regards port dues for ships, loading and unloading charges, conveyances, and food, than most other ports; whilst its trade statistics for the last ten years have earned for it the declaration from the Government of India that it is now third in importance amongst the seaports of the country, following Calcutta and Bombay and eclipsing Madras and Rangoon. Its admirable position will be greatly enhanced when the direct railway line to Delhi, the capital of India, is completed and direct air and steamer mail services connect Karachi with England.

At no port in India has there been a greater transformation during recent years than at Karachi, which was quite an unimportant town of about 10,000 inhabitants when the fort at Manora, the headland on the western side of the entrance to the harbour, surrendered in 1839 to a British squadron commanded by Sir Frederick Maitland. When Sir Charles Napier, conqueror of Sind, was leaving the province in 1847, after having governed it for four years, he is reported to have said: "You will be the glory of the East; would that I could come again to see you, Karachi, in your grandeur." The place was then a shallow and more or less landlocked lagoon, inaccessible to any but small craft owing to the existence of a



[Photo: I. Sequeira.]

CAMEL TRANSPORT AT KARACHI.

hundreds of years ago when the Mercantile Marine was in its early stages of development.

The contemplated times of transport to the distant countries are truly revolutionary. From England to Canada will be $2\frac{1}{2}$ days; to India 4 days; to South Africa $4\frac{1}{2}$ days; to Australia 7 days; and to other places upon a comparative and equivalent basis.

The immediate development that will necessarily follow the establishment of these great trunk lines by airship, will be numerous short distance or

SEAPORTS OF INDIA AND CEYLON.

bar at the entrance, although there was fairly deep water inside. The vessels of the ancient mariners could not, therefore, have been very large, for it is on record that the fleet of Alexander the Great took shelter in Karachi harbour in the year B.C. 326 during the south-west monsoon.

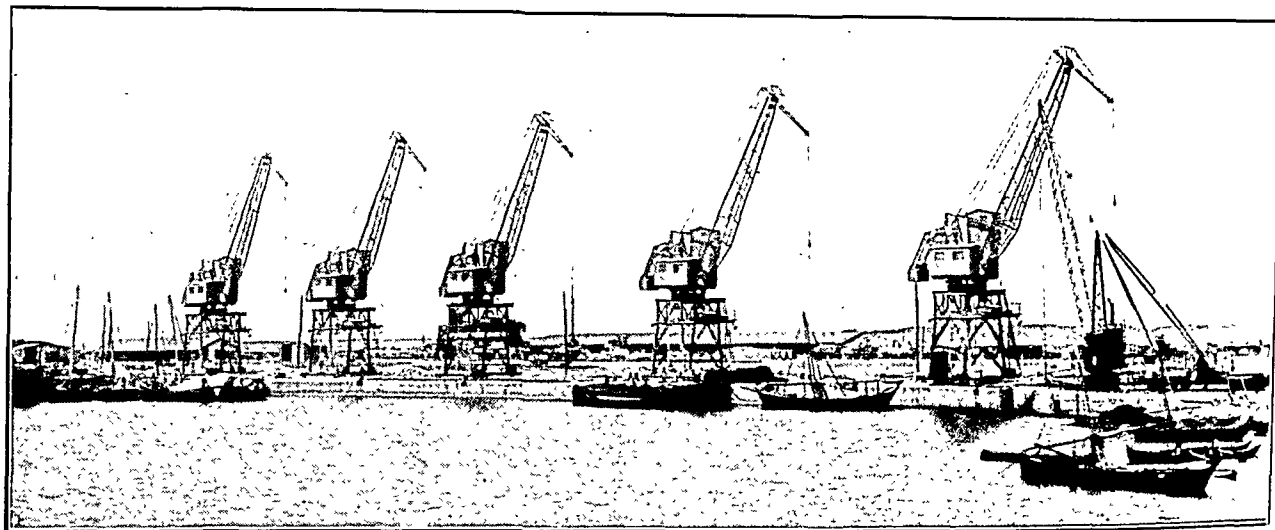
The first British ship to make the voyage from England to Karachi was the *Duke of Argyll*, of 800 tons burden, which passed safely over the bar into the harbour in 1853, when there was a depth of only 21 feet of water at high tide.

Karachi is 5,918 nautical miles distant from Southampton, and has the advantage of being 201 miles nearer Great Britain than Bombay. It is, as already indicated, the natural outlet for the produce of Sind, Baluchistan, the Phulkian, and other States, and of the vast wheat-growing areas of the Punjab and the United Provinces of Agra and Oudh. Its modern development as a port was

1886, which was amended in 1902 and on subsequent occasions.

During all these years the question of providing safe anchorage received the most careful consideration of engineers and others, among whom Mr. James Walker, C.E., stands out prominently for the expert assistance rendered by him. This gentleman designed the breakwater which forms a continuation, seaward, of Manora headland, and protects the harbour entrance from the fury of the south-west monsoon, and the work was admirably carried out in 1870-3 by Mr. W. H. Price, M.I.C.E., the port engineer.

The foundation stone of the "Merewether" ship pier (the first pier to be erected) was laid by His Excellency the Marquis of Ripon, then Viceroy of India, in the year 1880, and this structure served a useful purpose until 1908, when the scheme of general improvements necessitated its removal.



KARACHI PORT TRUST. CONSTRUCTION OF NEW WEST WHARF.
Berth No. 1, of twelve new berths, completed with five 2-ton Electric Cranes.
Depth alongside the Quay is 34 feet at low water.

commenced under the regime of Sir Charles Napier with the construction of a mole, one and a quarter miles in length, across the tidal marshes, and the Chinna Creek, which lay between Karachi and Keamari, now a township near the main entrance to the port. Keamari was then a small fishing village with a population of a few hundred inhabitants, and is now estimated to contain about 10,000. The causeway over the Chinna Creek has, however, since been removed, and the waterway was in 1864 spanned by a fine bridge 1,200 feet in length and 40 feet in width, the latter being increased by the Port Trust to 70 feet in 1914.

From the time of the British occupation to the formation of a harbour board in 1880, the port was managed by a master attendant and other officials who acted under the orders of the Commissioner in Sind, but the necessity for the formation of a Port Trust, which had continually been pressed upon the attention of Government, was met by the passing of the Karachi Port Trust Act No. VI of

Two years previously H.M.S. *Renown* lay at this pier, and on March 19, 1906, received on board the Prince and Princess of Wales (now Their Majesties the King and Queen) at the termination of their first Indian tour.

The Port Trust held its first meeting on April 4, 1887, and consisted of four members nominated by Government and four by the Chamber of Commerce and the Municipality, presided over by the Collector of Karachi. The number of trustees was increased to 11 in 1902 and 14 in 1925.

Since the formation of the Board of Trustees in 1887 the Port of Karachi has expanded in all directions, and in 1917 it was officially recognised by the Government as a First-Class Port. The facilities for shipping at the present time consist of accommodation available for any vessel that can pass through the Suez Canal, while ships drawing 25 feet and under can cross the bar at the lowest state of the tide and those drawing over 30 feet at the highest state. The following

works exist on the eastern side of the Ship Channel, where the Eastern Groyne, built about 1865, juts out from the mainland:

Bulk-Oil Pier, built in 1909, where liquid fuel, oil and petroleum are discharged by pipes direct into the installations of several oil companies with spacious depots at Keamari.

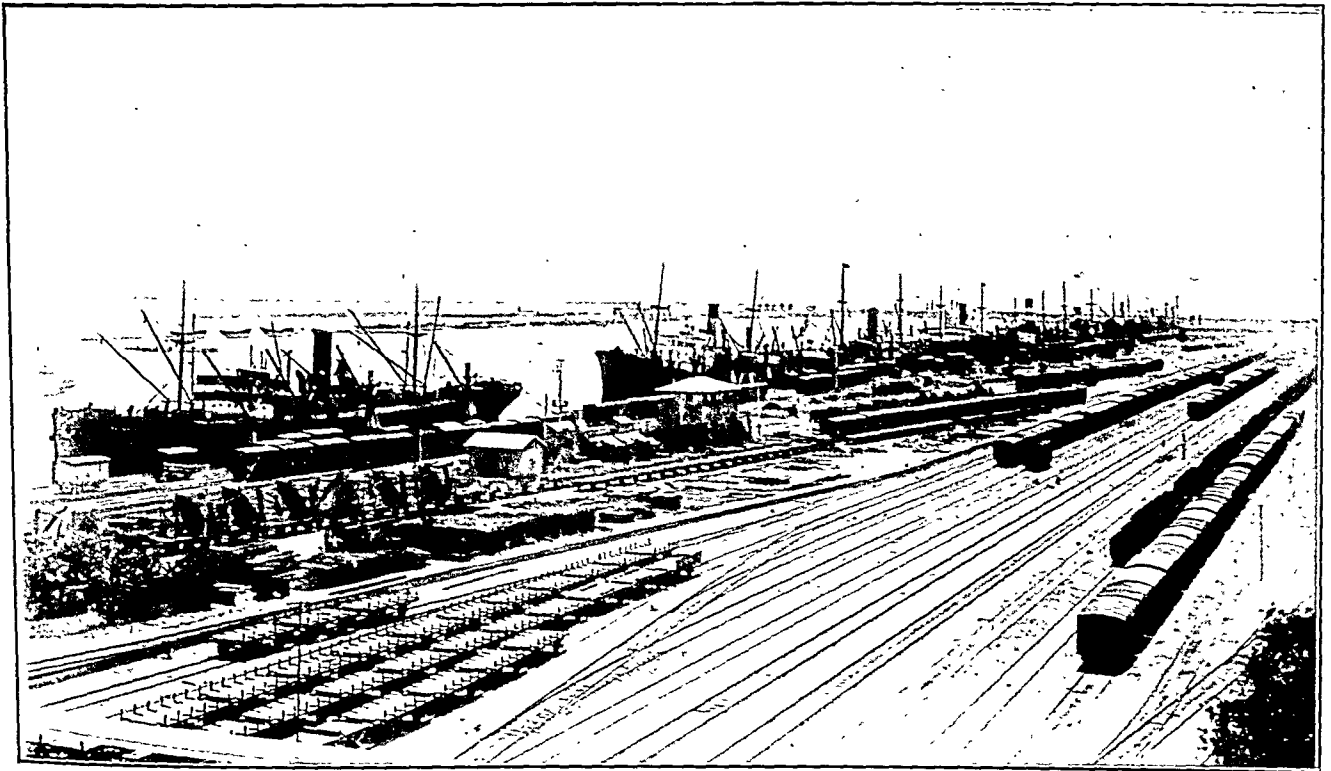
The Boat Basin, covering 11 acres in area, for landing and embarking passengers and goods on and from vessels in the stream, built in 1911.

Line of wharfage, 8,600 feet in length, completely served by railway with 87 hydraulic cranes of 35 cwt., one of 30 tons, one of 14 tons. This wharfage includes:

- (a) "Merewether Wharf," 4 ship berths, built in 1909.

a new flashlight which is alight every night giving an intermittent circular flash.

The Native Jetty stands at the north end of the Ship Channel with warehouses used by vessels discharging and loading in the stream. The jetty existed long before the Port Trust was thought of, but within recent years it has been improved and enlarged considerably. The ship berths are reached by an entrance channel dredged to 29 feet below low water level, which allows for vessels drawing 31 to 32 feet entering or leaving at 8 feet of tide. The steamer berths accommodate ten vessels of 550 feet; two of 500 feet; three of 450 feet; one of 400 feet, with 26 to 29 feet draft, and one of 325 feet, with 16 feet draft. The oil pier accommodates vessels up to 550 feet drawing



KARACHI PORT TRUST, EAST WHARVES AT KEAMARI.

View northwards from the south Overbridge.

The new West Wharf under construction can be seen in the background.

- (b) "Erskine Wharf," 3 ship berths, built in 1908.
 (c) "James Wharf," 3 ship berths, built in 1895.
 (d) "Younghusband Wharf," 4 ship berths, built in 1910.
 (e) "Giles Wharf," 3 ship berths, built in 1907.

The names of each wharf are after former Commissioners in Sind.

Return Wharf, 325 feet long, for coasting steamers served by railway and hydraulic cranes, built in 1912.

Heavy Lift Pier, one 14-ton crane, built in 1914.

Napier Mole Wharf, 1,824 feet long, for country craft trade.

In 1909 Manora Lighthouse was installed with

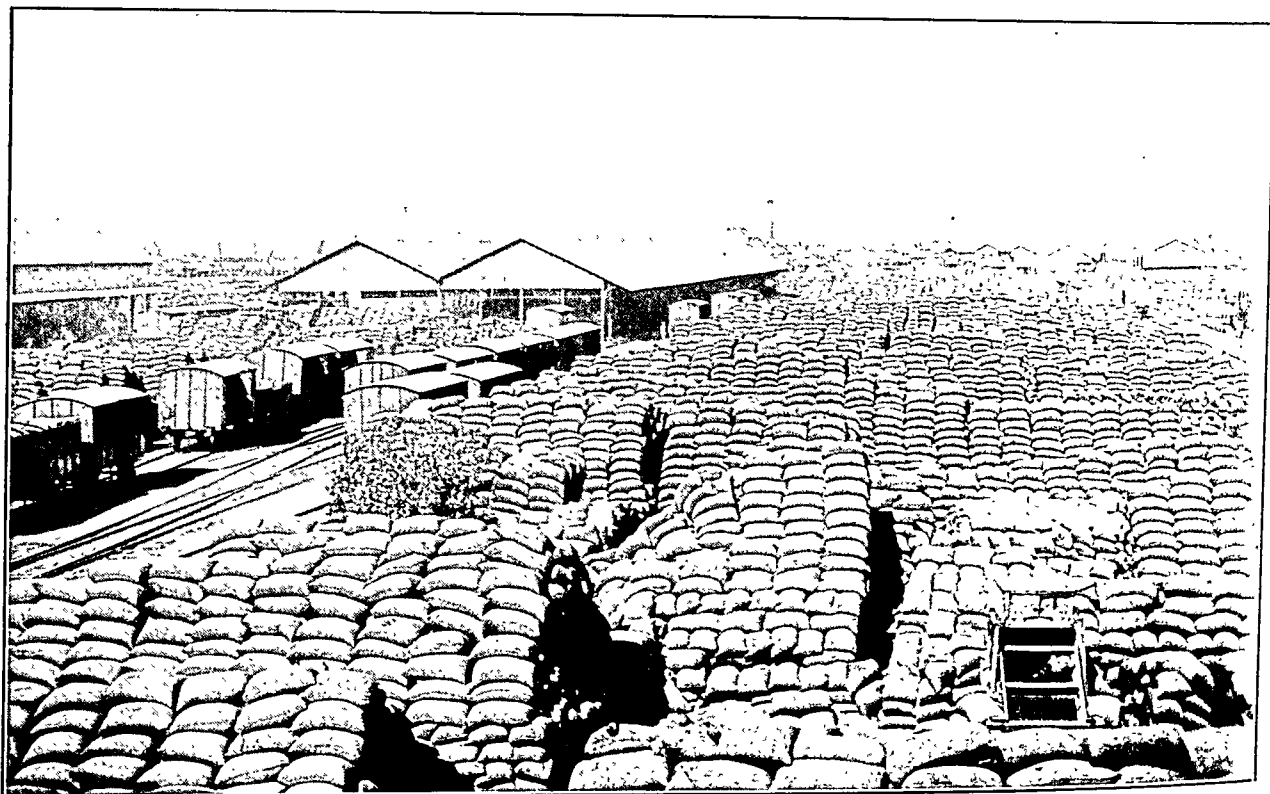
29 feet of water. Accommodation is provided for country craft by the Native Jetty (1,235 feet long), Napier Mole Boat Wharf (1,824 feet long) and the Boat Basin Railway Wharf (80 feet long). The steamer berths are each provided with five 35-cwt. hydraulic cranes; and there are one 30-ton and two 14-ton cranes fixed at suitable places. A 30-ton floating crane is also provided. There are, in addition to the above, ten fixed moorings for vessels with draughts of 26 to 32 feet and three with draughts of 17 to 23 feet suitable for vessels 500 to 600 feet long, also five swinging moorings with a draught of 21 to 24 feet. The accommodation of the oil pier has also been supplemented. Liquid fuel pipes and connections are available on Berths Nos. 2 to 6, and are connected to the oil installations and allow for two vessels being

bunkered with oil fuel simultaneously or one ship being bunkered and one tanker discharged simultaneously.

All imports are accommodated in the Mansfield Import Yard, where they are stacked in sheds, sorted, and handed over to consignees for local conveyance or put into wagons for up-country destinations. The accommodation of the yard consists of eleven single-storey sheds of 45,333 square yards in area, served by rail on one side and road on the other. There is a large area reserved for bonded goods.

The exports are handled from open and covered plinths at Keamari and the Thole Produce Yards with a total area of 632,000 square yards of plinth. Both yards are fed by roads between the plinths where up-country produce is sorted and stacked to

the necessity arises. Three berths of 550 feet each have been completed, and a fourth will shortly be ready for use. The main ship channel is being dredged to a depth of 28 feet, and the materials obtained are deposited in shallow water to form an area on which the concrete monoliths are sunk. The material in front of the monoliths will then be dredged to a depth of 34 feet to accommodate even the largest liners. The monoliths consist of concrete blocks built up to form units of 30 square feet with four 10 feet by 10 feet wells, the whole resting on a steel curb with cutting edges. Large 5-ton cranes working on 75-foot span Goliaths remove the material by means of grabs from the four wells. The monoliths sink easily by means of the cutting edge to 50 feet below low water level. The first six berths are of the following



KARACHI PORT TRUST. KEAMARI YARD, SHOWING WHEAT AWAITING SHIPMENT.

await shipment as required. The existing wharfing and loading arrangements have been found ample to deal with an export capacity of 19,500 tons per day, but steps are being taken to increase it in order to deal with Karachi's greatly increased trade.

Extensions to Karachi Harbour.

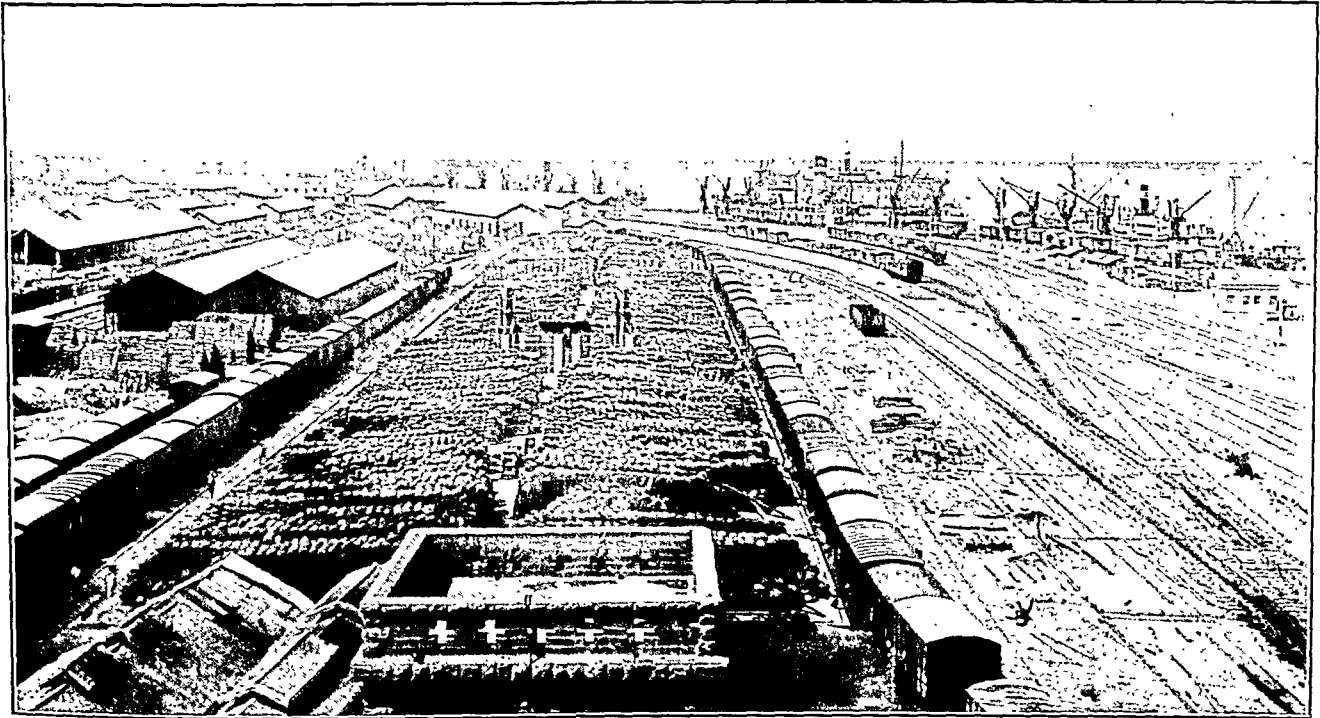
What is known as the West Wharfage Scheme is now well on its way to completion. The scheme is designed to provide additional accommodation for shipping by means of constructing a line of berths 7,300 feet long parallel to the existing steamer berths at a distance of 1,400 feet and suitable for deep-draught steamers. Six of these berths are now being constructed, and the plan enables the construction of additional whenever

dimensions: Berths Nos. 1, 2 and 3, 550 feet each; Berths Nos. 4, 5 and 6, 600 feet each, with 34 feet of water alongside at low water. The new wharves have been fitted with five 2-ton electrically-driven portal cranes with a radius of 65 feet.

Another scheme in hand is the reconstruction of the East Wharf, which is of steel pile construction. A new wall of concrete blockwork placed about 50 feet in advance of the present wharf will be built, and the space behind filled in with dredgings. A dry dock 630 feet by 80 feet is also shortly to be constructed. Reclamation work is being continuously carried on with a floating suction dredger capable of unloading barges full of silt received from bucket dredgers and discharging at a distance of 6,000 feet.

Trade of Karachi.				
Year.	Imports.		Exports.	
	Rs.		Rs.	
1887-88	...	6,18,61,331	...	4,08,16,877
1892-93	...	7,00,13,198	...	5,56,48,339
1897-98	...	8,71,07,380	...	7,27,20,313
1902-03	...	11,59,81,484	...	10,42,05,235
1907-08	...	21,66,01,881	...	11,14,26,339
1912-13	...	24,90,48,379	...	37,02,12,715
1916-17	...	20,85,97,022	...	28,70,92,354
1921-22	...	43,72,59,242	...	21,89,84,095
1922-23	...	20,94,68,883	...	46,06,25,461
1923-24	...	22,30,90,562	...	62,26,63,429
1924-25	...	30,93,48,932	...	85,79,25,124
1925-26	...	25,96,55,822	...	62,91,72,079
1926-27	...	28,22,97,288	...	54,77,13,949

bay Medical Establishment, who wrote: "The large masses of the indigenous population are particularly industrious, whether in the occupation of agriculture or the manufactures. The merchants of Sind are active and intelligent, well protected, though heavily taxed by the Government, but not so much as to prevent foreign traders to leave their native country and reside under the rule of the Amirs of Sind. Compared to a State between the Indus and Euphrates, Sind may be pronounced a country considerably advanced in civilisation. The Government, though severe, is vigilant and well ordered, too sensible of its own interests to ruin either the commerce or agriculture of the country. The people are orderly and obedient, and the laws are respected."



KARACHI PORT TRUST. EAST WHARVES AT KEAMARI.
View from the south Overbridge showing five of the seventeen berths, looking south over portion of the Keamari Export Yard (Bags of wheat awaiting export).

Inhabitants and Institutions.

A few decades ago Sind was the most backward division of the Bombay Presidency as regards the literary attainments of the people. There were then very few schools supported by Government funds, but in recent years the people of the province have manifested a desire for educational facilities. Nevertheless, both Hindu and Mohomedan parents are disinclined to give their daughters a liberal course of study. There are now an Arts College at Karachi, several training colleges, medical classes, and a large number of primary and secondary schools in various parts of the province.

Some idea of the general character of the people of Sind in 1836, shortly before the British conquest, can be gathered from the records of the late Assistant-Surgeon J. F. Heddle, of the Bom-

The dialect spoken in Sind is remarkable in that it is a language perfectly distinct from any other spoken in the whole of India. A famous Oriental scholar has defined its grammatical structure as heterogeneous, the noun and its branches belonging to the Sanscrit, whereas the verb and adverb are formed, apparently, upon the Persian model. The existing literature of Sind may be described as religious and poetical, the former being translations of Arabic works in divinity, moral tales, etc., the latter being the popular traditions of the country cast into rude and unartificial verse. Sind's greatest poet was Shah Abdul Latif, born in 1690 and died in 1751. He was buried in a beautiful tomb at Bhitshal, and a festival is held in his memory every year in the month of May. Another great saint of Sind was Udero-Lal, in whose

SEAPORTS OF INDIA AND CEYLON.

honour fairs are held every year at the town of that name in the Hala district.

The enormous rate at which Karachi's population is increasing is shown by the fact that for every ten deaths there are twenty-seven births, and this increase has been steadily maintained for the past five years. The growth of the Port of Karachi and the inauguration of the Lloyd Barrage project at Sukker (300 miles from Karachi) has also attracted large numbers of artisans and labourers to the city, so that its population to-day is easily seventy per cent. higher than that registered at the last census, 216,883 souls. Karachi's population has doubled within the last twenty years and

and to-day are mostly engaged in trade in cotton and piece-goods. They live principally in the Old Town Quarter of Karachi and are a wealthy, prosperous and contented people, enterprising and vigorous in all that they undertake. They possess two temples—the Mohan Maharji Temple and the Shinalhji Temple—several clubs, night schools, libraries and other institutions.

The Cutchi Bhatias also settled in Karachi long before the British occupation. They claim to be direct descendants of the divine Sri Krishna. In trade and commerce the Bhatia community are very enterprising, and they carry on a good deal of business with the Persian Gulf ports, East



[Photo: Gupta and Co.]

ELPHINSTONE STREET, KARACHI.

almost quadrupled since 1872. Here are the official census figures:

1872	...	...	...	56,753
1881	...	...	...	73,560
1891	...	...	...	105,199
1901	...	...	...	116,663
1911	...	...	...	151,903
1921	...	...	...	216,883

Hindus and Mussalmans number about 93 per cent. of the total population (the official figures are 201,119). The remainder of the population are classified as 9,649 Christians and 2,702 Parsis. Karachi does not possess any staple industry employing a large number of hands. The port is the principal source of employment, and therefore labourers and workmen form the greatest percentage of workers. The city of Karachi is a commercial one rather than an industrial one.

Of the 111,683 Hindus in Karachi's population according to the 1921 census the following are the more prominent groups:

Sind Punjabis. This community number considerably over two thousand. They settled in Karachi long before the British occupation of Sind,

Africa, Madagascar, Zanzibar, and some of the remote parts of Asia. They are all either merchants, shopkeepers, brokers, or agents.

Pushkharna Brahmins. There are two main divisions of Brahmins in India—the Dravids and the Gours. The Pushkharna Brahmins belong to the former class. They are numerically small in Karachi—about 200 families all told, and reside mostly in Old Town Quarter. Most of them follow the usual professions or occupations, and they support quite a number of temples.

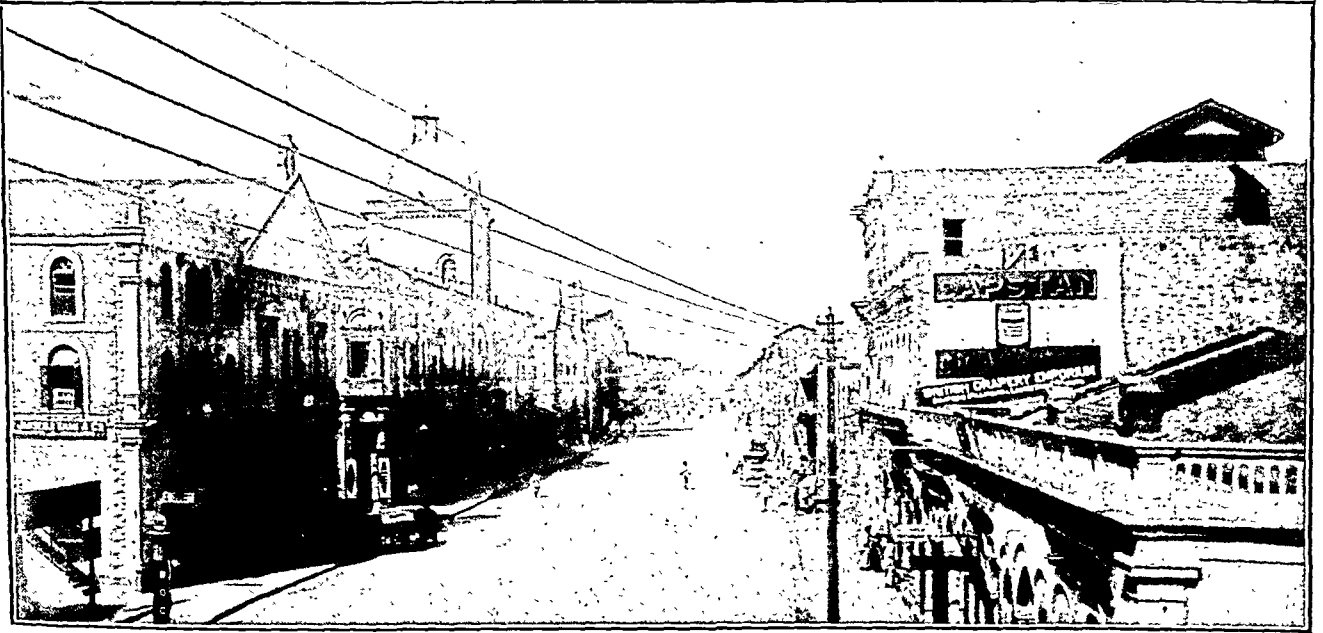
The Vanha Community is another small one numbering about 600 in Karachi, whose ancestors settled here more than a century ago. They maintain two temples in the city—the Sita Temple and the Sa Pursh Temple. The *Guru* (High Priest) of the community lives at Sehwan, in Upper Sind.

The Sindhi Saraswat Brahmins were originally a Punjab race who settled in Sind about the time of the British occupation as the result of the constant invasions and wars in the Punjab. They are found all over Sind, and each group of settlers are known by the name of the district they live in.

The Karachi Saraswats live mostly in Old Town, Market, and Napier Quarters. They perform a great many religious functions and do not allow any marriage ties between the various sub-branches of their caste. About four temples are maintained by the community in Karachi, one for each of the main sub-divisions.

The **Satha Community** have been in Sind since the days of the Amirs. There are now more than a hundred families of them living in Mithador and Kharadar (Old Town Quarter of Karachi). They follow clerical occupations and engage in trade on a small scale.

Mohamedans. There are about 100,000 Mohamedans in Karachi residing mostly in the west of the Old Town Quarter and the Lyari River. The majority of the sea-fishing community and workers on boats and wharves are predominantly Mohamedans. About forty years after the death of Mohamet, his followers made an attack on Sind by sea and land with the intention of establishing Islam in Northern India. These attacks were repulsed at first, but early in the eighth century a Mohamedan expedition, despatched by the Governor of Mesopotamia, conquered the whole country as far north as Multan. The Arab invaders settled down in Sind, married Indian wives



ELPHINSTONE STREET, KARACHI.

[Photo: I. Sequeira.]

The **Nassurpuris** number three hundred families in Karachi, and all mostly retail traders. They live principally in Mithadar and Joria Bazaar. A Panchayat Hall and Marriage Hall is maintained by them.

The **Brahma-Kshatry Community** originally came to Karachi from Tatta nearly a century ago. They are not very numerous, and are mostly artisans—builders, mistris, wood-workers, furniture-makers, silk merchants and small traders, about twenty-one per cent. being employed in Government offices. The community have a temple, a night school for boys, a library and a reading room.

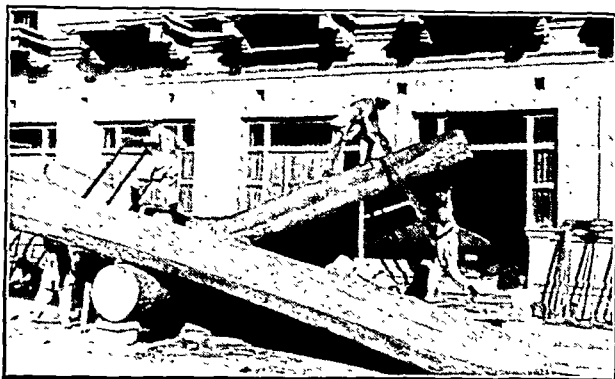
The **Cutch Bunnias** came to Karachi a century ago as traders, and now number about two thousand. They are very successful as retail traders, and are a fairly wealthy class of people.

There are in Karachi various other small communities whose advent dates long before the British occupation of Sind, such as the Chaproo Panchvara community, the Kathiawad Brahmins, Bhair Bunds, Tattai Amils, Serais, etc.

in many cases, and after being reinforced by large numbers of Mohamedans from Ghazni, persuaded the people throughout the country in the area of the River Indus to accept Islam as their religion.

The next great development so far as Karachi is concerned occurred through the influx of a large number of Mohamedan boat-owners and fishermen from the Persian Gulf and Africa. Mohamedan life to-day in Karachi is vigorous. The Sind Madressah is the largest Moslem educational institution in the Bombay Presidency, upwards of twelve hundred boys receiving education there at present. Other institutions for the Mohamedan community include many sports clubs, gymkhanas, mosques, etc. Educationally the Moslems of Karachi and Sind are a backward community, so much so that the Bombay Government have recently adopted a pro-Mohamedan policy in order to lift the community from their present low status and give them an opportunity of competing for the loaves and fishes of the public services on equal grounds with the Hindus. This has naturally caused a good deal of resentment among the latter,

and in certain cases has tended to accentuate the communal ill-feeling which is an under-current of life throughout the province, though fortunately much less so than in some of the other parts of India.



[Photo: Gupta and Co.]

SAWING LOGS AT KARACHI.

Parsis. Of all the communities in Karachi the Parsis top the list for hard work, enterprise, wealth, and solid progress. They are a very public spirited and philanthropic people numbering about three thousand altogether. The Parsi settlers in India date from the eighth century when they fled from Persia to escape persecution at the hands of the Mohamedan conquerors. They first settled at the port of Sahjan, about sixty miles north of Bombay, where they commenced to trade with Bombay. After 1661, when the Island of Bombay was taken over from the Portuguese, the Parsis extended their trade in that part of India, and when the British settled in Sind they brought



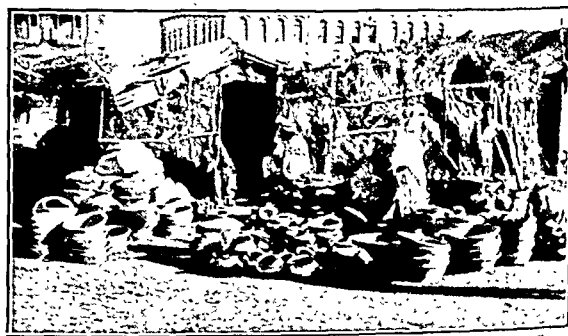
[Photo: R. Jalbhoy.]

PRIMITIVE IRRIGATION MACHINERY, SIND.

numerous Parsis with them for the purpose of maintaining supplies of provisions, etc. From that time onwards the Parsis of Karachi made a name for themselves as honest, hard-working and successful traders, and to-day that name still stands untarnished. There are many splendid reminders of the Parsi community's beneficence in Karachi—the Lady Dufferin Hospital, the Edulji

Dinshaw Charitable Dispensary, the Nadirshaw Edulji Dinshaw Engineering College, the Jehangir Kothari Parade, the Mama Parsi Girls High School, the Zoroastrian Club, the Katrak Poor Homes, the Parsi Fire Temple, etc., etc. All these institutions have been built entirely by the Parsis in Karachi, who maintain two fire temples, a Tower of Silence, a High Priest, and several semi-religious institutions.

Goans. There are roughly between three and four thousand Goans in Karachi, living mostly in Cincinnatus Town (named after a prominent Goan leader, Mr. Cincinnatus F. D'Abreo). Their ancestors first came to Karachi and Bombay three centuries ago as traders from Portugal, led by the renowned Vasco da Gama in 1498, long before the arrival of the British in India. They were originally pure stock from Portugal, but a great deal of inter-marrying with Indian women occurred, with the result that they ceased to be known as Portuguese, but were called Goans, from Goa, south of Bombay, the capital of Portuguese India. After the advent of the British in Sind the Goans



[Photo: Gupta and Co.]

POTTERY SELLERS, KARACHI.

began to flourish more rapidly, many of them obtaining Government appointments and positions in commercial offices.

The Goans of Karachi are a thrifty people, not particularly wealthy but honest, deeply religious and careful in the ways of living. Certain internal dissensions of a political nature have served to check the progress of the community to some extent; otherwise they are a quiet, reliable, and industrious people with a keen sense of their duties towards their neighbours. Cincinnatus Town is a colony of Goan people built on modern lines on the co-operative town-planning system, well laid out and self-contained.

Europeans. Excluding the British military forces, there are about three thousand Europeans in Karachi. They are all temporary residents either connected with various branches of the public services or else engaged in private firms. The majority remain for a few years and then are transferred to some other part of the country or world. Very few indeed remain in Karachi for the best part of their lives. Thus Karachi's European population is a floating one that is increasing year by year with the growth of the city and port. Since

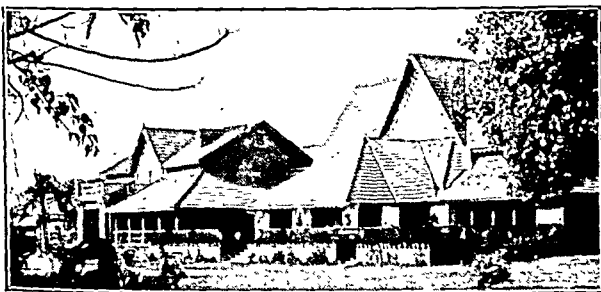
the establishment of the Royal Airship Base at Drigh Road, Karachi's European population has greatly increased, so much so that it would be more correct to estimate it at nearly four thousand all told.

Sind Club.

Originally housed in a small bungalow in Elphinstone Street, the Sind Club was removed to its present place in 1883. The main building was built entirely of light limestone in the Italian style. A second building, comprising a two-storey block of chambers, was erected in 1888. In 1892 four chambers were built over the smoking room. In 1904 the third block was constructed, and finally, on the acquisition of the Masonic Lodge adjacent to it, a new block containing nine sets of chambers was added in 1915.

Karachi Gymkhana.

Before the construction of the present buildings in 1886, the nucleus of the Gymkhana was near the rifle range where the European population of Karachi used to meet in the early days of the conquest, and which received the name of Scandal



[Photo: R. Jalbhoy.

GYMKANA, KARACHI.

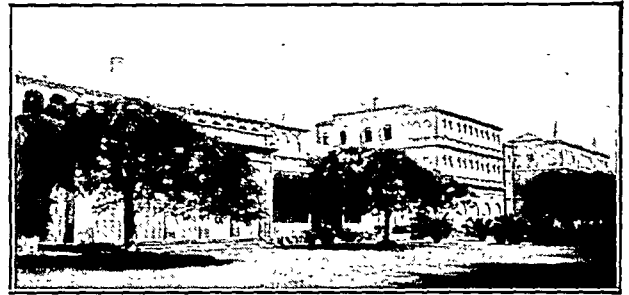
Point. The road leading to the Gymkhana is called Scandal Point Road.

Frere Hall.

The Frere Hall is the most notable building in Karachi, and commemorates the long and brilliant administration of Sir Bartle Frere when he was called to the Viceroy's Council in 1859. The building was commenced in 1863, and completed in 1865 at a cost of Rs. 1,80,000, of which Rs. 22,500 was raised by public subscription. Rs. 10,000 was contributed by Government, and the Municipality paid the balance. The hall is in the Venetian Gothic style, and is built of the familiar yellow Karachi limestone, relieved very effectively by white oolite quarried near Bholari, south of Kotri, and red and grey sandstones from Jungshahi. The columns and arches of the wide verandahs are exceedingly graceful, and the whole detail pleasing, but the tower and spirelet harmonise neither with the body of the building nor with each other. The apex of the spirelet is 144 feet above ground level. From the porch in the east side a double staircase leads up directly to a fine hall in the upper storey 70 feet long by 35 inches in width and 38 inches in height. This is the Town Hall of Karachi for public meetings.

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lectures, balls, concerts, and dramatic entertainments. It has wide verandahs on two sides and opens at the north end by an arch into a second fine room, 63 feet by 25 feet, which can be used to supplement the main hall and accommodate a large stage or platform. On the ground floor there is a hall equal to the one above. The room



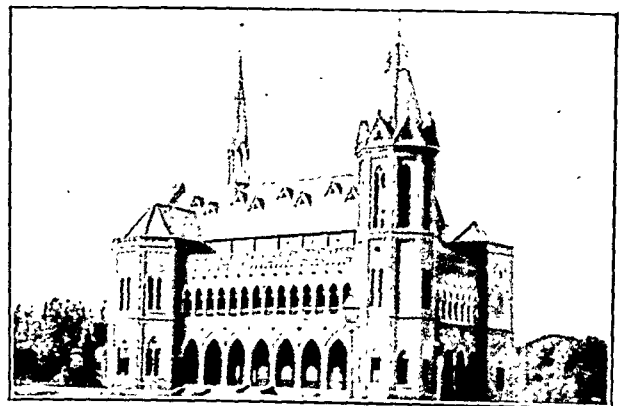
[Photo: I. Sequeira.

SIND CLUB, KARACHI.

at the end, corresponding to the upper one, accommodates the Frere Hall Library. The main hall upstairs is adorned with some good busts, among which are two of King Edward VII and Queen Alexandra, presented by Mr. Edulji Dinshaw, C.I.E. There are also oil paintings of former Commissioners of Sind.

Cantonments.

The Karachi Cantonment has existed ever since the conquest, and an area of 2.92 square miles was reserved for it by Sir Bartle Frere when fixing the municipal limits in 1858. Its present area is about three square miles. The Sadar Bazaar, which was originally included in the Cantonment, was handed over to the Municipality and an arrangement was made in 1896 whereby the Municipality, in view of the fact that it recovers wheel-



[Photo: R. Jalbhoy.

FRERE HALL AND LIBRARY.

tax, etc., from residents in the Cantonment, pays to the Cantonment Committee an annual sum of Rs. 7,000 for repair of roads, lighting, etc. Other sources of Cantonment revenue are land, house, and conservancy taxes, etc., the income from which for the last ten years has averaged Rs. 40,982. The average expenditure, chiefly on conservancy, has been Rs. 42,704. The Canton-

ment Committee is constituted under the Cantonment Code Cantonment Act of 1924 and consists of an officer appointed by the Officer Commanding, Sind Independent Brigade Area, as President, and five other Officers as members, one member nominated by the District Magistrate, and seven members elected by the voters resident in the Cantonment. The Executive Officer, Karachi Cantonment, performs the duties of Secretary.

In October, 1903, the whole of Manora was declared a cantonment. The area included is 302 acres and 32 gunthas, Baba and Bhit not being a part of it. The sources of revenue are a property rate on houses and lands, a sanitary cess on non-



[Photo: R. Jalbhoy.

MEREWETHER CLOCK TOWER, KARACHI.
(On left Bunder Road. On right McLeod Road.)

military residents, and a tax on vehicles and animals. The military roads in the Cantonment are maintained by the Military Works Department and the other roads by the Cantonment Committee.

Gardens.

The most important of the public gardens is the Zoological Garden, between the old Commissariat Stores and the Lyari. It was originally one of the Government gardens which were initiated almost immediately after the British occupation for the purpose primarily of supplying the troops with fresh vegetables. Some time after the formation of the Karachi Municipality the garden was handed over to its care. Afterwards it was laid out on a new plan by the late Mr. H. M. Birdwood, and with the help of district officers and native gentlemen in all parts of the province became a zoo. The sandy soil and the climate appear to be favourable to the health of its inmates, which have thriven, and in many cases bred, and multiplied, so that the Karachi Zoological Garden has a reputation quite out of proportion to its size and character. Vegetables and fruits of many kinds are grown in it, and it contains a large vineyard which produces excellent grapes.

South of the Zoological Garden is a shady *bagh*, full of old trees commonly known as the Mere-

wether Garden, or the Commissioner's Garden. It belongs to a bungalow which was purchased by Government in 1869 for the *ex-Rani* of Satara and afterward used as a residence for Chima Saheb, brother of a former Raja of Kolhapur. After Chima Saheb's death it was reserved as a guest-house for the accommodation of the Mirs of Sind. Some years ago, at a lecture by Mr. H. M. Birdwood, read before the Society of Arts, Sir W. Lee-Warner made an amusing reference to this garden, and took to himself some credit for saving it when he was a member of the Finance Committee appointed by Government to cut down redundant expenditure. One of the members was drawing his pen through a curious item in the expenditure of Sind, which no one could explain, on account of "Mrs. Gordon's Establishment." Sir W. Lee-Warner having been in Sind looked into the matter and found that the name was only a Bengali printer's version of Mirs' Garden Establishment. The garden is maintained still, though the bungalow collapsed a few years ago, and up to the present has not been rebuilt.

The Burns Garden, on the Kutchery Road and separated from the Sind College by the Burns Road, is the memorial of a gentleman of whom there is no other historical record. He is commonly spoken of as Dr. Burns. The garden has an area of 26-20 acres, and is intersected by walks shaded by well-grown trees, with flower beds and vegetable plots between.

There are several minor municipal gardens.

Dayaram Jethmal College, Karachi.

Built in 1887 at a total cost of Rs. 1,86,514. The Dayaram Jethmal College is in the Italian



[Photo: R. Jalbhoy.

DAYARAM JETHMAL SIND COLLEGE, KARACHI.

style, and has a façade 431 feet long. The central tower rises behind the portico to a height of 12 feet and has a dome 30 feet in diameter, built in stone. The college was formerly named the Sind Arts College, and was re-named after the late Hon. Mr. Dayaram Jethmal in whose memory a fund was raised by his friends and admirers in the province. The sum, supplemented by handsome donations from relatives of the deceased, was made over to the College Board. The college is

excellently equipped with chemical and physical laboratories and workshops, and attached to it is a hostel accommodating 150 students.

Merewether Clock Tower.

The Merewether Clock Tower was raised by public subscription to perpetuate the memory of Sir William Merewether, Commissioner-in-Sind, 1866 to 1877. In the pointed style of Gothic architecture, and in the form of an Eleanor cross, it stands on a basement 44 feet square, rises to a height of 102 feet, and carries at an elevation of 70 feet a clock with four faces, each 7 feet in diameter. The large bell which strikes the hours weighs three cwts. and the smaller bells for the quarters one cwt. each. The foundation stone was laid by Sir James Ferguson, Governor of Bombay in 1884, and the completed structure was opened to the public and made over to the Municipality by Sir James Evans in 1892. The total cost of the structure and clock was Rs. 37,178.

Climate.

Karachi's climate is superior to that of any town in the plains of India. The dry burning heat of Central India and the enervating humidity of Bombay and Calcutta are entirely lacking in Karachi. From April to October cool westerly and south-westerly sea breezes blow, and from November to March a cool bracing land breeze infuses everyone with energy. Occasionally there are land breezes from the desert which are unpleasant in that they give a scorching sensation to the skin and raise the temperature to 105 degrees (dry



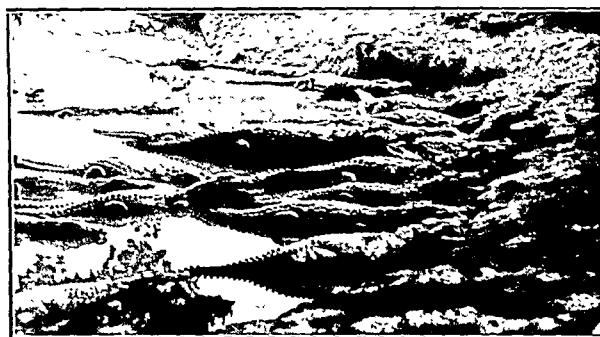
CLIFTON'S BEAUTIFUL PARADE BUILT BY SIR JEHANGIR H. KOTHARI, O.B.E.

heat), but they rarely last for more than two or three days at a time. The rainfall of Karachi is about seven inches a year (usually three in July and three in January). The average temperature is about 77 degrees Fahrenheit, ranging from 60 to 63 in January and February to 86 to 88 degrees during the south-west monsoon months. Whenever snow falls at Quetta, Karachi's barometer falls sometimes as low as 36, and sometimes thin ice can be found on the surface of stagnant water.

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Official figures of Karachi's rainfall for the last ten years:

Years.	Rainfall (Inches).
1918	2.04
1919	3.39
1920	1.97
1921	16.90
1922	1.99
1923	5.57
1924	3.69
1925	4.38
1926	20.04
1927	8.19



[Photo: R. Jalbhoy.

CROCODILES AT MUGGER PIR, NEAR KARACHI.

Water Supply.

The water supply of Karachi is obtained from the Malir River's underground streams. It is "hard" and of first-class quality. It flows into Karachi by gravity in a cement covered conduit for a distance of twenty-two miles, whence it is distributed to the houses of the city and suburbs by means of underground pipe lines. At present there is no pressure sufficiently powerful to carry water beyond the ground floor of the houses, which means that each householder desiring to convey water to the second or third storeys must instal a small electric or hand pump. Within a few years, however, this disability will cease, for the Karachi Municipality are now considering a rather expensive scheme whereby sufficient pressure will be available in the water mains to carry water to any height desired and in any quantity. The new scheme will take three years to complete.

Clifton.

The people of Karachi are very fortunate in possessing such an admirable sea front as that of Clifton, which is one of the finest marine resorts in the Orient. The locality has always been exceedingly popular because of its cool sea breezes and beauty, and eventually the crowds visiting it became much greater than could be accommodated with comfort. The Karachi Municipality accordingly provided a largely increased area at New Clifton by taking in a hill to the north and the garden and house of Sir Jehangir

H. Kothari, O.B.E., who very generously made a gift of his property to the Municipality in order that a great seaside promenade might be created. The then Governor of Bombay, Sir George Lloyd, laid the foundation stone on February 10th, 1919, and the Parade was opened by Lady Lloyd on January 5th, 1920. In addition, Sir Jehangir H. Kothari built at his own expense a pier from the Parade to the water's edge at an estimated cost of three lakhs of rupees. This magnificent pier was completed in 1920-2, and was opened by Lady Lloyd on March 21st, 1921.

The Parade comprises a promenade, two terraces on projecting crags, a shelter, a path, carriage stand, and a terminal kiosk. The promenade is 600 feet long and 30 feet wide, is paved

promenade and terraces are sunk lower than the level of the foot-path.

The Lady Lloyd Pier is about 1,300 feet long and 15 feet broad. It is of the same type of construction as the Parade, of which it forms the compliment, and is composed of local Ghizree stone, protected on each side by an ornamental balustrade of pink Jodhpore stone. At intervals in its length it has been widened into two terraces each measuring 60 by 35 feet, the first terrace being reached by five shallow flights of steps, also of Jodhpore stone. For the remainder of its length the pier descends by a gentle slope to the pavilion on the beach. It is carried on 76 segmental arches each with a 13-foot opening. The Ghizree stone columns carrying the arches rest on concrete blocks, which are supported by rein-



[Photo: Gupta and Co.]

STREET IN NATIVE QUARTER, KARACHI.

with cement concrete and provided with cut-stone balustrades on both land and sea faces and thirty-two benches.

The shelter, in front of the promenade at a point near the entrance to the pier, is built of cut Ghizree stone with a Mangalore tiled roof and concrete cement floor. On the land side of the promenade there is a cement foot-path 20 feet wide for a length of 575 feet, and 15 feet wide for 250 feet, where it encircles the kiosk. The latter, standing out in bold relief, is supported on columns of cut-stone work with an elliptical roof of pink Jodhpur stone. An octagonal seat is provided in the centre of the kiosk.

Landward, the carriage stand contains an area of 169,170 square feet sufficient to accommodate 800 motor cars. To enable occupants of carriages to have an uninterrupted view out to sea, the

forced concrete piles. The pavilion is 70 feet by 50 feet in area, and the floor is 12 feet high above sea level. It rests on piles 12 feet high supporting the reinforced concrete raft. Combined with the Parade, this new project has added a novel architectural feature to the beautiful scenery of Clifton.

Mugger Pir.

Pir Mangho, or as it is popularly known, Mugger Pir, ten miles north of Karachi, is the tomb of Haji Mangho, a holy hermit, who is said to have settled there about the middle of the thirteenth century. He was visited by a quaternion of saints known as the four friends, of whom Lal Shahbaz Kalandar of Sehwan was the most famous, and they made the barren valley a more pleasant residence for him by causing a hot spring to issue from the rock and a grove of date palms

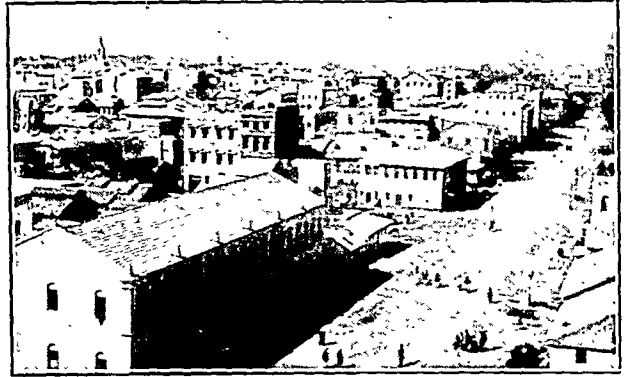
to spring up from the ground. When the Pir died and was buried his grave became a place of pilgrimage for pious Muslims from all parts of the country. But it is also a resort of Hindu devotees, who call it Lala Jasraj. This double character is common among the shrines of Sind; the Mussalman Lal Shahbaz is the Hindu Raja Bhartari and the Mussalman Kwaja Khizr is the Hindu Jinda Pir.

Mugger Pir is traditionally "a place to see," the only one in the neighbourhood of Karachi. It includes a mosque in the form of a neat white square building, surrounded by a small terrace, with a cupola and slender minarets at the corners, erected on the summit of a rocky crag of limestone and said to be 2,000 years old. The interior of the mosque contains a tomb surmounted by a canopy of carved woodwork supported on slender pillars. Close to the mosque is a large pool, enclosed by a wall, with many crocodiles.

Newspapers.

The first newspaper published in Sind appears to have been the *Sindian*, which, according to the old Government *Gazetteer* of 1876, had at that time been in existence for more than a quarter of a century. This became or gave place to the *Beacon* and then to the *Sind Times*. In the meantime (in 1878-79) the proprietors of the *Civil and Military Gazette* at Lahore had started a Sind

issue of their paper in Karachi, the name of which was afterwards changed to the *Sind Gazette*. In 1886 it was combined with the *Commercial Press* and the ownership transferred to a joint stock company. Now known as the *Daily Gazette*, it is the provincial organ of the European population, and has a steadily increasing circulation.



[Photo: Gupta and Co.]
SUDDAR BAZAAR, KARACHI.

Karachi has also another daily paper called the *Sind Observer*. The oldest vernacular paper in Sind is said to be the *Sind Sudhar*, which was started originally by the Educational Department and handed over in 1884 to the since defunct Sind sabha. It is now a private concern and appears to have a large circulation.

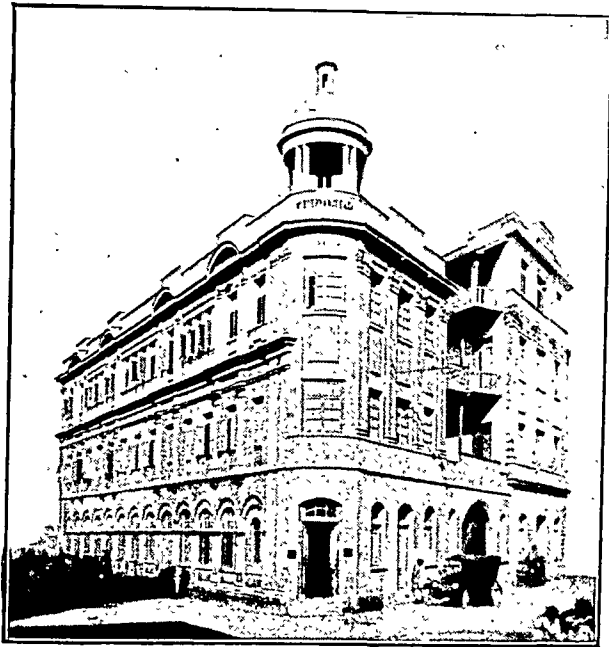


AN INDIAN FAMILY.

COMMERCIAL KARACHI.

NUSSERWANJEE and CO.,
General Merchants and Commission Agents, Head Offices: Machi Miami Road.

Of all the peoples of India none are more interesting than the Parsis, who fled from Persia in the 8th century to escape the persecution of the Mohamedan conquerors of their land. There are only about 100,000 Parsis in all India; and while most of them are at Bombay, there are about 2,700 at



HEAD OFFICES OF NUSSERWANJEE and CO.

Karachi, where they contribute very influentially to local trade. Amongst the most noteworthy of the Parsi firms there are Messrs. Nusserwanjee and Co., whose extensive business was started in 1879 by Khan Bahadur Nusserwanjee R. Mehta as a general merchant in a small way. Year after year, through hard work and unswerving probity, his trade developed considerably, and his name became well-known and highly esteemed throughout Sind and elsewhere. In 1903 he obtained a plot of land, about 3,000 square yards in extent, fronting Elphinstone and Dundas Streets, upon which he built the large and handsome two-storeyed establishment that is so popular for general groceries and provisions, wines and spirits,

etc. Thereafter Mr. Nusserwanjee acquired many other properties, including the large building in Machi Miami Street where his head offices are now situated and where also are transacted his wholesale business and his activities in connection with his import and export agencies.

A good idea of the important part which Messrs. Nusserwanjee and Co. play in the business life of Karachi will be obtained by the fact that they are proprietors of the following:

Karachi Steam Roller Flour Mills Co., Ltd., established in 1904 by Mr. Nusserwanjee, and now one of the largest and best managed concerns of the kind in Sind. The mill is equipped with up-to-date machinery, gives employment to some hundreds of persons, and has a daily grinding capacity of 1,500 maunds; **Sind Patent Tiles Co.**, founded by Mr. Nusserwanjee in 1912, and devoted to the manufacture of tiles of every description for public institutions, banks, offices, churches, and private residences, etc. As the products are absorbent they possess the inestimable advantage of being able to counteract the extremes of climate. Messrs. Nusserwanjee and Co. are part owners of the **Bhârat Patent Tiles Co. of Bombay** and **Karachi Saw Mills**, founded by Mr. Nuserwanjee in 1919; **Hyderabad Ice Factory**, founded by Mr. Nusserwanjee in 1907, and having a capacity of 27 tons of ice per day; **Star Salt Works, Karachi**, founded by Mr. Nusserwanjee in 1925.

Khan Bahadur Nusserwanjee Mehta was honoured with the title of Khan Bahadur during the visit of His Majesty the King-Emperor to India on the occasion of the Durbar at Delhi in 1911. He is assisted in his affairs by his sons, Mr. Homi N. Mehta and Mr. Jamshed N. R. Mehta. Mr. Jamshed N. R. Mehta is President of the Karachi Municipality, on which he has written an interesting and instructive book dealing with its administration, activities, and future.

Messrs. Nusserwanjee and Co. have retail stores in Serai Road and Keamari, besides their establishment in Elphinstone Street, already referred to. Their telegraphic address is "Ascendam," Karachi, and the codes used by them are the A B C 5th and 6th editions and Bentley's.

THE EASTERN EXPRESS CO., LTD., Forwarding, Shipping and Clearing Agents, Bunder Road.

THE EASTERN EXPRESS CO., LTD., operate on a scale that makes their business the largest of its kind in India, and there is no other organisation in that country so admirably developed and conducted for all work pertaining to forwarding, shipping, and clearing agents. In that connection the company operate for the Government of India Municipalities, Indian States and Railways, and a very large number of the leading steamship companies, banks, merchants, mills, etc.

An interesting article on the business appeared in the issue of the *World's Carriers* for January 15, 1927, from which the following is an extract:

"In order to carry out the work entrusted to it successfully and economically, large reinforced concrete godowns covering over 20,000 square feet, at a cost of £15,000, have been built, and large portable and electrical cranes have been installed. The company have also command of a

large fleet of lighters and steam tugs and a staff of 115 men.

In addition to shipping many thousand of boxes for soldiers and deceased officers, free of charge during the war, the company were shipping contractors to the Army Department, and in this capacity handled daily many thousands of tons of foodstuffs and munitions of war for shipment to the various Eastern bases. In later years the company have been appointed Government clearing agents for the Lloyd Barrage and Sutlej Valley Irrigation Schemes, and recently many hundred tons of structural steel work have been cleared by the company for the Armstrong Construction Co. for the new airship base at Karachi.

A special feature of the company's business is the collection and remittance of C.O.D.'s. Upwards of a hundred clearing and forwarding agents in the United Kingdom, Europe, and the United States ship merchandise to their care, advising the amounts that are to be collected against deliveries. These collections are remitted immediately on realisation.

From trade statistics of the port it is shown that over 70 per cent. of motor cars imported are cleared and forwarded by the company, whose policy is strict concentration on clearing, forwarding, transport and insurance. Buying and selling merchandise is not entered into in any way by the company. They are, therefore, in a position to undertake all manner of work efficiently and econo-

mically for all classes of commodities without prejudice to any interests.

Furthermore, the company's organisation is the direct channel from producer to consumer, enabling hundreds of small producers to find satisfactory outlets for their merchandise, and in this capacity it truly forms an important link in East Indian commerce."

Recently, in conjunction with Lep Transport and Depository, Ltd., London, The Eastern Express Co., Ltd., have inaugurated a remarkable parcel service, by which they undertake to receive in London and deliver to any address in India parcels weighing from half a pound up to fifty pounds, at reduced postal rates, and thus saving much trouble and expense. So advantageous is this scheme that the many hundreds of parcels dealt with by the company are increasing in number continually.

The business was started in 1910, and is also prominently and influentially established at Bombay, where it provides similar facilities as those included in its admirable service organisation at Karachi. The company have representatives at practically all the principal ports in the world, and are agents for all the best-known firms of shipping and clearing agents in Great Britain. Their telegraphic address is "Flyingfish," at both Karachi and Bombay, and the codes used by them are the A B C 5th edition and Bentley's. The managing agents of the company are Messrs. Forbes, Forbes, Campbell and Co., Ltd.

PESTONJEE BHICAJEE, Stevedores, Dubashes, and General Contractors, Keamari.

It is very noteworthy that the trade of stevedores and dubashes at Karachi is, to a great extent, in the hands of Parsi firms. The oldest business of that kind there is the one founded in 1855 by Mr. Pestonjee Bhicajee, who supplied provisions and stores under military protection, to the Army during the time of Sir Charles Napier in Sind. Afterwards Mr. Pestonjee Bhicajee established himself as a stevedore and dubash at Karachi, and long before his death there in 1889 he made over the important business which he had developed very successfully to his son, Mr. Peerozshaw Pestonjee, spending the rest of his life in retirement. Mr. Peerozshaw Pestonjee died in 1891, and the concern is now carried on by his sons, Messrs. Jehangeer P. Pestonjee Bhicajee, Sorabjee Pestonjee Bhicajee, and Byramjee P. Pestonjee, who are assisted by their sons, Dr. Pestotun (son of Mr. Sorabjee) and Peerozshaw (son of Mr. Byramjee).

The satisfactory manner in which the firm's activities are carried on may be indicated by reference to their long connections with various well-known steamship companies. Thus, for instance, they have been stevedores and dubashes since 1875 to the British India S.N. Co., Bombay Persia S.N. Co., and the Mogul Line; since 1890 to the Hansa Line; since 1895 to the Austrian Lloyd—changed in 1920 into the Lloyd Triestino Line; since 1901 to the Asiatic Steam Navigation

Co.; since 1892 to the City line—changed in 1902 into one of the Ellerman Lines; since 1902 to the Hall Ellerman Lines; and since 1902 to the Holland British India Line, and others too numerous to mention here. They have also been contractors to Admiralty agents for H.M. Navy, etc., etc.

During the Great War Messrs. Pestonjee Bhicajee did admirable work for the British, French, Italian, Belgian, Portuguese, and Japanese Governments, and built a number of sea-going vessels of the Kotia dinghey type with the object of meeting the great need for cargo space when the Government had relinquished the major portion of the accommodation in steamers calling at Karachi. They have also built several lighters, and transact lighterage business in Karachi harbour.

Messrs. Pestonjee Bhicajee are also established at Port Okha, on the coast of Kathiawar, which is under the Government of H.H. the Maharaja of Gackwar of Baroda, and there they operate as stevedores and dubashes to the Ellerman Hall and City Lines, the Clan Line, Hansa Line, and Ellerman Bucknall Line. They have also been dubashes, stevedores, and agents for the Lloyd Trestino and Marittima Italiana Lines, Clan Line, and other tramp cargo steamers.

The firm's telegraphic address is "Jehangeer," Karachi, and the codes used by them are Scott's 10th edition and the A B C 5th edition.

B. R. HERMAN and MOHATTA, LTD.,**Engineers and Ship-builders, Vulcan Iron Works, Wood Street and Old Queen's Road.**

KARACHI has undoubtedly a great future, and is even now undergoing a remarkable transformation by the erection of impressive buildings. Amongst the most noteworthy of the recent developments in that connection are the new premises of Messrs. B. R. Herman and Mohatta, Ltd., occupying an area of about $7\frac{1}{2}$ acres, at the junction of Wood Street and Old Queen's Road, into which they recently removed in order to keep abreast of the various developments of N.W. India. The offices and machinery showrooms form an imposing and handsome masonry block at the corner of the two roads, behind which the workshops extend. The latter, which have been designed in accordance with modern practice, and are well equipped with overhead cranes and up-to-date machinery throughout, comprise heavy and light structural shops, smithy, machine shops, iron and brass foundries, saw-mill and wood-working shops.

Transport and general handling is facilitated by railway lines in the shops and about the yard, connected to a siding into the works from the N.W. Railway.

The company specialise in the construction of railway wagons, steel bridges of all types, steel buildings and sheds, cranes, bulk-oil and high-service tanks, well curbs, light-draught steamers, steam tugs and launches, steel cargo barges, motor passenger vessels, motor launches, iron castings up to 10 tons, forgings, etc., and the products of their works are despatched all over India and to Mesopotamia, Persia, and British East Africa.

In addition to the foregoing, the firm transact considerable business through their machinery, hardware and metal departments, aided by their technical staff, and are sole agents in N.W. India for numerous well-known manufacturers, including:

Marshall, Sons & Co. (India), Ltd.
Alley & McLellan, Ltd., Glasgow.
Small & Parkes, Ltd., Manchester.
Stewarts & Lloyds, Ltd., Glasgow.
Arthur Balfour & Co., Ltd., Sheffield.
The Mitchell Conveyor & Transporter Co., London.
The Warrington Wire Rope Works, Ltd., Liverpool.

COWASJEE and SONS, Coal Importers, Bunkering Contractors and Stevedores, Keamari.

No firm at Karachi have done more for the development of local shipping facilities and resources as coal importers, bunkering contractors, and stevedores, etc., than Messrs. Cowasjee and Sons. Their large and important business was founded by Mr. Cowasjee Rustomjee Variawa, who established himself as a stevedore and dubash in 1887, when Karachi as a seaport was in its infancy. In 1893 he became a coal merchant and contractor for bunkering. In 1900 Mr. Cowasjee, who retired in 1908, made his son Fakirjee a partner. In 1909 another of his sons, Minocher, became a partner, and the business continued to develop very successfully. The firm hold contracts for supplying coal to the Admiralty, Royal Indian

Stringer & Sons (Cradley Heath), Ltd., England.
Wales Dove Bitumastic, Ltd., Newcastle-on-Tyne.
Kerner-Greenwood & Co., Ltd., Kings Lynn.
Medway Safety Lift Co., Ltd., London.
John M. Henderson Co., Aberdeen.
The Bergius Co., Ltd., Glasgow.
The American Pulley Co., Ltd., U.S.A.
H. H. Robertson & Co., England.
W. H. Dorman & Co., Ltd., Stafford.
The Tata Iron & Steel Co., Ltd., Jamshedpur.

Messrs. B. R. Herman and Mohatta, Ltd., keep considerable stocks of machinery and other specialities of the various firms whom they represent, and also several thousand tons of steel sections for structural work, all of which are stored under cover.

The Vulcan Iron Works, which give employment to many hundreds of persons, were established in McLeod Road by Mr. B. R. Herman, M.I., M.E., in 1883, with modern and useful machinery sufficient to cope with the character and comparatively small quantity of engineering work obtainable in N.W. India at that period.

By careful direction through a long period of hard times, honest dealing, and good work, Mr. Herman brought his business to a leading position amongst engineering undertakings in India, where, as well as in Mesopotamia and Persia, the firm are well-known for the excellence of their workmanship and the satisfactory manner in which their contracts are completed.

Amongst many of the latter may be mentioned the British Residency at Baghdad and the British Consulate at Bunder Abbas, in the Persian Gulf, and complete bulk-oil installations at Keamari for the Royal Dutch Petroleum Co., Burmah Oil Co., and Standard Oil Co.

In 1919 the firm was formed into a limited liability company under its present title. The Board of Directors comprises Mr. B. R. Herman (Chairman), Mr. L. B. Herman (Managing Director), Mr. Ramgopal G. Mohatta, Mr. Shivratn G. Mohatta, Mr. B. E. Herman, and Mr. Chandratn G. Mhoondhra.

Messrs. B. R. Herman and Mohatta, Ltd., have a branch office at Lahore, and their telegraphic address at both places is "Expansion."

Marine, Port Trust, Karachi, and to a number of English companies whose vessels put in at the port. Messrs. Cowasjee and Sons were pioneers in introducing Australian and Natal coal into Karachi, and on one occasion they held a contract with the North Western (State) Railway for the supply of 50,000 tons of Natal coal in the course of twelve months.

The firm have many testimonials regarding their ability in everything pertaining to their activities, and have coal depots at Baba Island and Stowell Yard, Keamari. Their telegraphic address is "Jubilee," Karachi, and the codes used by them are the A B C 5th and 6th editions, Watkins, Scott's, and Bentley's.

JOHN FLEMING and CO.,
Engineers, Contractors, and Automobile Experts, McLeod Road and Frere Road.

MR. JOHN FLEMING, C.S.I., who founded the business of Messrs. John Fleming and Co., some years before the Indian Mutiny, was in his day very prominent and influential in connection with the development of Bombay and the welfare of its people. It was he who inaugurated, against much opposition, the scheme of reclamation of the foreshore on the eastern side of Bombay Island, a scheme which was persistently and steadily carried out in spite of the troubles during the famous share mania of 1864 in the city.

In 1894 Mr. Fleming was joined in partnership by Mr. Thomas Wilson under the style of John Fleming and Co. The firm were contractors for the building of the Victoria Docks, Bombay, which was carried out in a most successful manner and to the complete satisfaction of the Bombay Port Trust Authorities. So energetically in fact was that contract operated that it was finished three months before the stipulated time.

As general engineers and contractors Messrs. John Fleming and Co.'s activities developed very greatly. Amongst the many important works also successfully carried through by them may be mentioned the electric lighting of the Crawford Market, the Government Telegraph Office, the Yacht Club Chambers, the offices of Messrs. King, King and Co., Admiralty House, Messrs. Wheeler and Co.'s building, and many others in Bombay; the lighting of the great palace of H.H. the Gaekwar at Baroda, the Makarpura palace belonging to the

same Prince, the palace of the Maharaja at Bikaner, and of the palaces of Jodhpur and Indore, the Agra Club, etc. The firm had also the running of the electric installation for the Municipality of Delhi for some years, which was the first Municipal electric installation in India. They likewise executed considerable contracts for water supply, drainage, etc., for Bombay, Delhi, Lahore, Peshwar, Karachi, Kotah, etc.

In 1900 Messrs. John Fleming and Co. opened at Karachi a branch which soon developed into one of the most noteworthy of the local concerns. In 1907 it was separated from the Bombay business and has since been owned by his son, the present proprietor, Mr. Alexander Lothian Wilson, who has been connected with it since 1902. Mr. Thomas Wilson died in 1917.

Messrs. John Fleming and Co. are well known as engineers and contractors, general commission agents and automobile experts. They are suppliers to the Public Works Department, railways, etc., and are agents for:

National Oil Engines.

"Lincona" Balata Belting.

Brunton's Steel Wire Ropes.

Yale Chain Blocks.

Arrol-Johnston, Galloway, Wolseley, Oldsmobile, and Swift Cars.

New Imperial, New Hudson Motor Cycles.

Albion and Morris Motor Lorries.

Dunlop Rubber Co. (India), Ltd. (sole wholesale distributors for Sind and Baluchistan).

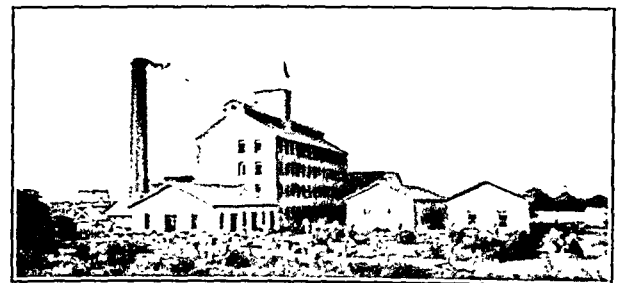
The firm's telegraphic address is "Morelos," and they use Bentley's code.

INDIA FLOUR MILLS, LTD., Lawrence Road, Cincinnatus Town.

IN view of the extensive exportation of wheat from Karachi it is not surprising to find the flour-milling industry well established there. The India Flour Mills, Ltd., for instance, started in 1910, is representative of the best methods in vogue for the perfection of process and result in modern milling. The area occupied by the undertaking is over six acres, and it gives employment to upwards of 200 persons. The main block consists of a massive four-storeyed structure, 150 feet in length and 100 feet in height, comprising the basement, roller, purifier, and centrifugal floors. The whole of the machinery is driven by suction gas power, developing 500 brake h.p., which is transmitted by 18 ropes from a huge flywheel. The screening and washing rooms are equipped with complete dust-extracting, grading, washing, and conditioning machinery, and are provided with bins for holding 600 tons of wheat.

The roller floor is fitted with Turner's heavy pattern fluted and smooth roller mills, 31 in number, and the capacity of the plant is 30 sacks (each of 280 lbs.) an hour of best white flour. Turner's dustless purifiers are installed on the second floor, and scalpings and the majority of the centrifugals are on the top floor.

All modern improvements in constructional work have been incorporated in the mills, and the materials are of the best-known quality—for instance, the flooring and spouting is made of



INDIA FLOUR MILLS.

selected teak wood; double fire-proof doors on each floor give communication across the rope race from the screening rooms to the mill; and the race is surmounted by a tower for the purpose of a sprinkler installation reserve water tank.

The power house is situated at right angles to the milling and wheat-cleaning department, and there are several large godowns and sheds for the storage of wheat and flour and other products.

The establishment is lighted throughout by electricity. The flour produced is of the highest quality, and commands a large sale, for consumption in India and export.

The Board of Directors comprises Dr. G. Pires, L.R.C.P., M.R.C.S., etc.; C. M. Lobo, B.A., LL.B.; Dr. E. A. Mascarenhas, L.M. and S., L.R.C.P., M.R.C.S. (Lon.); and Messrs. Ignatius Sequeira, M. Misquita, and A. C. D'Souza.

The Secretary is Mr. Cincinnatus F. D'Abreo, who began his business career in 1878 in a newspaper office, and later served in a mercantile office and various Government Departments, retiring in

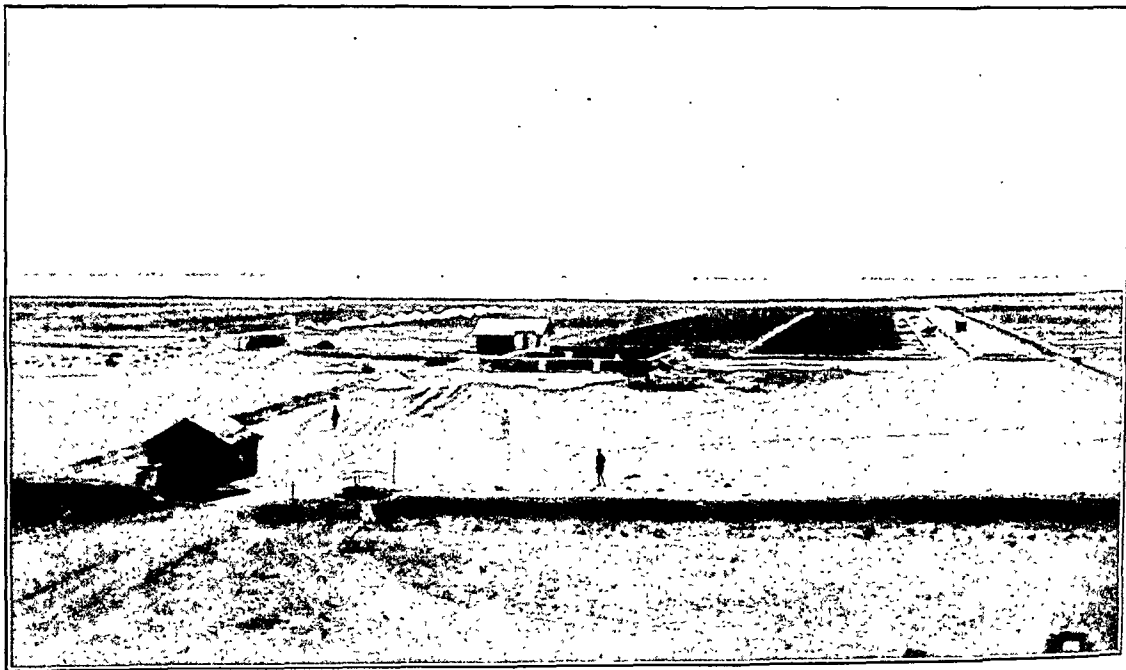
1917 from the post of Assistant Collector of Customs and Salt, and Deputy Shipping Master, Karachi. Mr. D'Abreo was Vice-President of the Karachi Municipality in 1925-26; is Secretary of the Indian Life Assurance Co., Ltd., and a Director of several joint-stock companies. The suburb of Karachi, Cincinnatus Town, was started largely through his efforts and bears his name.

The authorised capital of the India Flour Mills, Ltd., is Rs. 6,00,000; subscribed, Rs. 4,50,000; paid-up, Rs. 3,60,000. The telegraphic address is "Indiaflour," Karachi, and the codes used are the A B C 5th edition, Bentley's, and private.

GRAX, LTD., Salt Manufacturers, Maurypur.

To the west of Karachi lies an extensive shallow tidal area with only one small opening to the sea. Centuries of tide and sun and natural forces have thrown up along this backwater a beach containing so much salt that excavations in the beach only

panns is always discoloured, and never of the finest commercial quality. Nevertheless it suits the local taste. Accordingly, when salt manufacture was organised as a Government monopoly, development followed traditional lines. Mr. Maury in



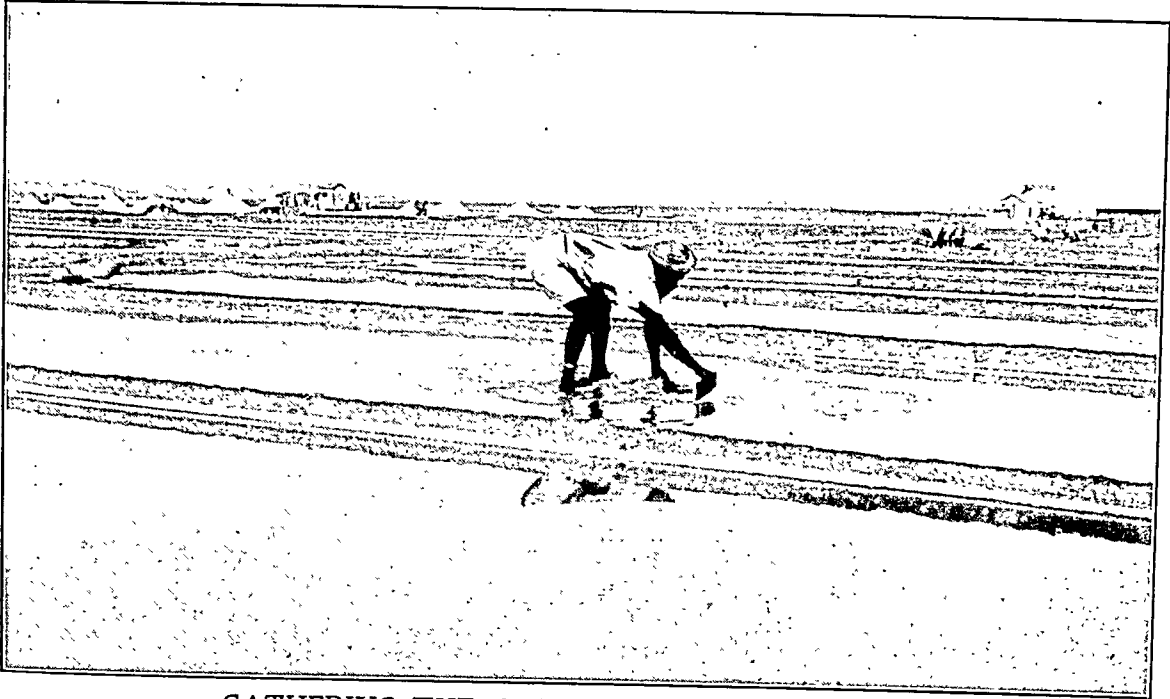
SALT WORKS OF GRAX, LTD., MAURYPUR.

a few feet deep are filled by percolation with brine so strong that on condensation by solar heat it deposits salt readily. Before the British came to Sind, the Lunaris, who are salt manufacturers by tradition, used to sink small wells and obtain brine by a primitive contrivance that drops a bucket into a well and enables it to be lifted out when filled. The Lunaris ran their brine into shallow pans with clay bottoms and sides, and there allowed it to evaporate. Conditions for solar evaporation are ideal in Karachi where rain is seldom, the sun always clear and hot, and there is a wind which can be relied upon. The Lunaris evaporate their salt till it has formed large crystals because it adheres to the clay of their pans, and has to be washed. Much of the clay is washed out, but salt from clay

1877 established Government salt works, named Maurypur, and these have since supplied Sind. They now produce annually about 350,000 maunds of salt, but are not so extensive as they have been. Their place is being taken by private salt works. The pioneer and most important of these is operated under the name of Grax, Ltd., and owes its foundation to Mr. Harris Greenfield, who devoted many years to inducing Government to open salt manufacture to private enterprise and also to the study of salt and the processes of its manufacture. The result of his labours is that pumping from long wide ditches and the condensation of seawater have replaced the traditional method of obtaining brine, while clay evaporating pans have been superseded by scientifically constructed pans

which yield pure white salt and allow its crystal growth to be controlled so as to secure any fineness desired, while the salt is very free from magnesium chloride and other impurities which the Lunar is cannot effectively eliminate. For

specially selected by Mr. Greenfield because of its peculiar suitability for salt manufacture and its favourable situation for communication with the port of Karachi. The works when completed will produce at least 50,000 tons monthly of salt



GATHERING THE GRAX SALT AT MAURYPUR.



DESPATCH OF THE GRAX SALT FROM MAURYPUR.

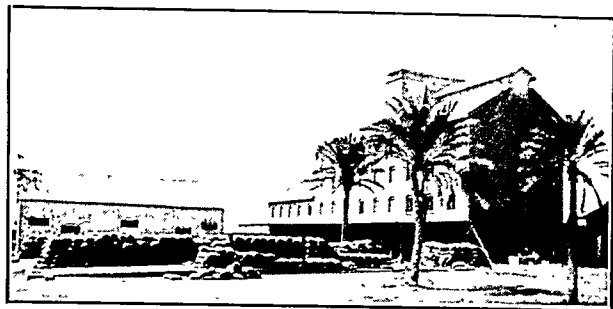
transport camels are still used, but only until a light railway has been laid down. Grax, Ltd., has a capital of Rs. 6,00,000, and the offices of its managing agents, Messrs. Greenfield and Hallifax, are at Greenbari, Karachi. The company is developing on a sound basis a large area of land

superior to any hitherto manufactured in the East and also to all but the very finest quality imported into India. The undertaking of Grax, Ltd., is thus one which will have an important influence in the future on the trade and prosperity of the town and port of Karachi.

SEAPORTS OF INDIA AND CEYLON.

SIND FLOUR MILL COMPANY, Dhobie Ghat Road.

THE oldest flour-milling undertaking at Karachi is that of the Sind Flour Mill Co., Ltd., which



SIND FLOUR MILL.

was formed in 1896, occupies an area of about six acres, and gives employment to about fifty

STRAUSS and CO., Grain and Seed Exporters, McLeod Road.

THE old and well-known London firm of Strauss and Co., who are influentially established in America, Canada, and the European Continent, opened their branch at Karachi in 1912, and are one of the largest houses there engaged in the exportation of wheat, barley, seeds, etc., and in the importation of sugar. In the year 1924-25 they were the largest shippers of wheat from Karachi, half of the total of 1,000,000 tons from that port in the period mentioned being despatched by them.

persons. Commencing with one mill the business developed very successfully, and in 1907 a second mill was completed. Both mills are equipped throughout with modern machinery supplied by the well-known firm of Messrs. Henry Simon, Ltd., of Manchester, and the total capacity is 20 sacks of flour per hour, the product being sent to ports on the Malabar Coast, the Red Sea, Persian Gulf, Ceylon, Egypt, and Mauritius, as well as consumed locally. The capital of the company is three lakhs of rupees, and an average dividend of ten per cent. has been paid. The chairman of the company is Mr. W. D. Young, and the other directors are Messrs. G. Miller, K. K. Sopariwala, and E. K. Sopariwala. The latter gentleman also acts as agent. The manager is Mr. R. F. Keeling. The telegraphic address is "Mill," Karachi, and the codes used are the ABC 5th edition and Bentley's.

The chief of the firm is Mr. E. A. Strauss, M.P., and the head office is in Holland House, Bury Street, London, E.C. It is interesting to note that the first grain shipment by telephone between London and New York was put through by Messrs. Strauss and Co. on January 22nd, 1927.

The manager at Karachi is Mr. H. C. Whitehouse. The telegraphic address is "Gambrinus," and the codes used are Bentley's, A B C, and private.

THE INDIAN LIFE ASSURANCE COMPANY, LTD., Elphinstone Street.

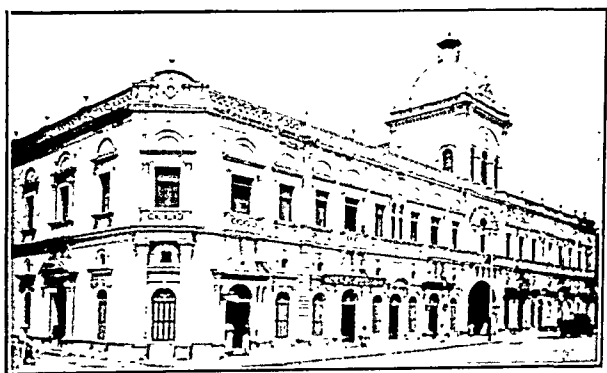
THE INDIAN LIFE ASSURANCE Co., LTD., was formed as the outcome of a scheme propounded by a number of gentlemen in Karachi for organising a mutual aid association, embracing a modified form

ceeded in their object may be gauged by the fact that during the first fifteen months of the company's existence the total expenditure did not exceed Rs. 2,431.

The authorised capital was originally fixed at Rs. 1,00,000, but this amount was increased in 1907 to Rs. 4,00,000, subscribed capital being Rs. 4,00,000 and the paid-up capital Rs. 1,45,000.

Policies are issued for all kinds of insurance business usually conducted by life assurance companies; but the directors have from time to time devised several attractive schemes which have been greatly appreciated by the public. On May 31st, 1927, there were 6,301 policies in force, assuring a sum of Rs. 1,45,10,360, with an aggregate annual premium of Rs. 5,85,302. The amount to the credit of the Trust Fund, viz., Rs. 45,12,838-11-6, showed an increase of Rs. 3,41,53-7-6 over the previous year, which ended with a balance of Rs. 41,71,305-4-0. The dividend paid for the year ending May 31st, 1927, was at the rate of 30 per cent. on the paid-up capital, free of income tax, leaving a balance of Rs. 10,803-3-5 to be carried forward after carrying Rs. 60,000 to Dividend Reserve Fund.

The building in Elphinstone Street containing the head offices was purchased by the company in 1907, and it also owns the large building in Bombay known as "Carnac House," where it has a board of management.



INDIAN LIFE ASSURANCE CO.'S BUILDING.

of assurance; but after full consideration had been given to the proposal, it was discarded in favour of the foundation of The Indian Life Assurance Co. upon an actuarial basis.

The company, which was designed especially to meet the needs of people with moderate incomes, was registered on March 7th, 1892, its head offices being situated in Elphinstone Street, Karachi. The promoters strove their utmost to avoid heavy preliminary and working expenses, and that they suc-

**ANDERSON and CO., Steamship and General Commission Agents,
Freight and Exchange Brokers, McLeod Road.**

THE oldest firm of steamship agents and freight and exchange brokers at Karachi is that of Messrs. Anderson and Co., whose business was established about 1857 by Mr. S. W. Anderson. Since the death of the latter in 1905 it has been carried on by his son, Mr. C. S. Anderson, who has been actively engaged in it since 1897, and he is now assisted by his son, Mr. P. S. H. Anderson.

As brokers Messrs. Anderson and Co. are always well versed in the state of the various markets and investment values, and their activities, therefore, are always an unfailing reflection of the fluctuations of demand and supply in that connection. Naturally their long and prominent association with the commerce and shipping of Karachi renders their services invaluable to everyone in Karachi

and elsewhere whose interests can be benefited thereby.

Messrs. Anderson and Co. are agents for:

Lloyd Trestino N. Co.
Marittima N. Co.
Australian Alliance Assurance Co. (Marine).
London & Lancashire Insurance Co. (Motor Cars).
New Zealand Insurance Co. (Fire and Marine).
"Adcol" Oils and Greases.
"Atlas" Ruskilla Paints and Preservatives.
"Lemoine" Champagne.
Denman's Port and Wines.
Fenner & Alder's Paints, Enamels, and Varnishes.
Lindener Brewery, M.T.C. Brand.

The firm's telegraphic address is "Nosredna," Karachi, and the codes used by them are Scott's 10th edition, A B C 6th edition and Bentley's.

L. COLLINS, General Merchant, Commission and Insurance Agent, McLeod Road.

BUSINESS conditions throughout India are greatly changed from what they were in former decades. To-day keen competition exists in every branch of endeavour, and success can only be obtained by efficiency of service and goods thoroughly adapted to local requirements and the idiosyncrasies and differentiations of the vast medley of the country's population. Amongst the most noteworthy exponents of modern business methods and enterprising adaptation to the commercial needs of Karachi is Mr. L. Collins, whose activities as a general merchant, commission and insurance agent, cover a very comprehensive field. Established since 1921, Mr. Collins has ever been quick to seize every opportunity presented by the fluctuations of demand and supply and has built up an excellent connection by accurate interpretation of specialised requirements as well as by the intelligent anticipation that accrues through careful study of the many factors influencing local trade.

He is sole agent in India for Messrs. W. V. Bowater and Sons (1926), Ltd., the well-known paper makers and export paper merchants of Lon-

don, New York, and Sydney. He is also agent for:

Commercial Union Assurance Co., Ltd.
Standard Life Assurance Co., Ltd.
Imperial Live Stock General Insurance Co., Ltd.
Birkmyre Bros., Calcutta; Canvas, Hose, Hood Cloth, Paulins, Jute, Hessians, Guinies, Twines, etc.
Parsons, Fletcher & Co., Ltd., London; Printing Inks, Varnishes, etc.
Furnival & Co., Reddish, Stockport; Printing Machinery.
Mahums, Manchester; Piece-goods and Yarns.
Harry Greayar, Hamburg; Continental Sundries.
M. L. Van Norden, New York; Surplus Newspapers.
Arturo Junghans, Venice; Clocks and Watches.
Chrome Leather Co., Ltd., Madras; Boots, Shoes, Leather, etc.
F. E. Harcastle & Co., Bombay; Marine Surveyors, etc.
H. & W. Simpson & Co., Calcutta, Marine Surveyors, etc.

Mr. Collins recently formed the company known as Sind Motors, Ltd., which is the local agency for the Ford vehicles, and has large and well adapted showrooms and workshops in Bunder Road. His telegraphic address is "Snillocco," Karachi, and his codes are the A B C 5th and 6th editions, Bentley's, and private.

**CHRISTOPHER and CO., LTD., Wholesale Wine and Spirit Merchants, McLeod Road.
(BARTLETT and CO., Agents.)**

THE business of Messrs. Christopher and Co., Ltd., is probably the oldest of its kind in the British Empire. It has been established for hundreds of years, and it would be interesting to record its story amid the vast changes that have so altered the conditions of the world from those that obtained when the original Mr. Christopher began his activities in the London of long ago.

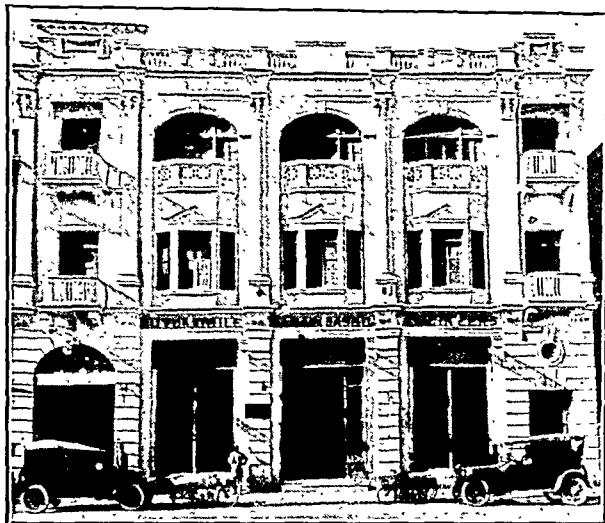
Messrs. Christopher and Co., Ltd., opened in 1923 their agency at Karachi, where they contribute an important part to the local wine and spirit trade. Previously, however, they had been exporting wines and spirits to India for about half a century, and have long made a special study

of the conditions in vogue there for the enhancement of their supplies. In the interesting booklet which they issue as a price list, etc., there is very useful information well worth the attention of everyone in India who appreciates good liquor and how it should be kept.

The firm's agent for the East is Capt. F. G. Bartlett, trading as Bartlett and Co. The manager at Karachi is Mr. C. A. Oliver. The telegraphic address there is "Virgin," and the standard codes are used. Messrs. Christopher and Co.'s head office is at 45, Pall Mall, London, S.W.1, and they have the honour of appointment to H.M. the King and H.E. the Viceroy of India.

NARAINDAS and CO., Automobile Engineers, Bunder Road.

REFERENCE to the motor trade at Karachi is synonymous with reference to Messrs. Naraindas and Co., whose business is the largest of its kind in the provinces of Sind, Punjab, Baluchistan, and the



NARAINDAS and CO'S PREMISES.

North-Western Frontier. Their handsome premises at Karachi, which are their own property, occupy an area of about 5,000 square yards, and are well adapted to their purpose. The firm are sole agents in the territory mentioned for the Chevrolet, Oakland, Pontiac, Citroen, Hupmobile, and Vauxhall cars, and their stock of spare parts and accessories for these is exceptionally large and comprehensive. The great assortment is exceedingly well arranged in a system that prevents all waste of time in regard to uncertainty as to whether any particular item is in hand.

A. C. GREENFIELD and CO., Merchants and Agents, Bunder Road.

THE business of Messrs. A. C. Greenfield and Co. is the newest European undertaking at Karachi. It was started at the end of 1927 by Mr. A. C. Greenfield, who had been engaged with one of the local firms at that port during the previous fifteen years, so that he is well equipped by practical experience of local conditions and requirements for success. The goods handled by him are chiefly piece-goods and metals.

The most noteworthy feature of the business, however, is the complete manner in which the firm operate as automobile engineers. In their Karachi establishment they give employment to about one hundred skilled men, all specialists at their own particular jobs, and this keen specialisation naturally tends towards greater efficiency than would otherwise be possible. Each of the many departments is a separate demonstration of that fact, and there is nothing associated with the motor industry which Messrs. Naraindas and Co. are not able to execute with the utmost skill and expedition. For that purpose they have an up-to-date plant of machinery, including an equipment for the Duco process of paint spraying. They turn out vehicles to meet all requirements, from light cars to great transportation lorries and busses. The versatility of the firm's operations include electro-plating, upholstery, etc.; and their first-rate resources and facilities for repairs of all kinds, no matter how difficult, are certainly a valuable asset to local motorists.

Messrs. Naraindas and Co. were the founders of the cycle and motor trades in Baluchistan, and commenced business at Quetta in 1905. Year after year their trade developed very successfully, and they are now one of the most noteworthy firms in the motor trade in India. They give employment to about 230 workmen, 100 of whom are engaged at their premises at Lahore, where they sell very many more cars than at Karachi. They have also a branch at Quetta. The proprietors and partners are Messrs. M. P. Naraindas and W. P. Menghruij. The telegraphic address is "Automobile," and the codes used by them are the A B C 5th edition, Bentley's, and private.

The firm are also insurance agents, and represent The Century Insurance Co., Ltd., The World Marine and General Insurance Co., Ltd., The Fuso Marine and Fire Insurance Co., Ltd., and Scottish Union and National Insurance Society.

The telegraphic address is "Verdant," and the codes used are the A B C 5th and 6th editions, and Bentley's.

N. D. MALLIK and SONS,

General Merchants and Government Contractors, Corner of Bunder Road and Napier Road.

MESSRS. N. D. MALLIK AND SONS, originally established at Quetta for many years, have been operating at Karachi since 1915, and are exporters of Indian produce such as wheat, barley, gram, flour, wool, etc. They are owners of the Narain Flour and Dhall Mills, Karachi, which turn out upwards of a thousand maunds of dhall and flour daily.

The firm have branches at Bombay and Lahore. Their telegraphic address is "Malliksons," Karachi, and the codes used by them are the A B C 5th and 6th editions and Bentley's.

The partners are Messrs. M. D. Mallik, I. N. Mallik, and G. N. Mallik, B.A. (Honrs.).

BRUNNER, MOND and CO. (INDIA), LTD., Chemical Manufacturers, Katrak Terrace, Machi Miani.

This well-known firm is described on pages 70 and 71.

MALLIK, THADHANI and CO., Importers, Exporters, Insurance, Shipping, and General Commission Agents, Corner of Bunder Road and Napier Road.

MESSRS. MALLIK, THADHANI AND CO. have been established since 1920 and operate as general merchants, insurance, shipping, and general commission agents. They are exporters of Indian herbs, spices, dried fruits, mustard seed, etc., and their principal imports are hardware, tools, enamelled ware, perfumery, silks, etc.

They are agents for the following:

Fire:

Batavia Sea & Fire Insurance Co., Ltd.
Burma Fire & Marine Insurance Co., Ltd.
Licenses & General Insurance Co., Ltd.
Triton Insurance Co., Ltd.

Marine:

Argonaut Marine Insurance Co., Ltd.
Batavia Sea & Fire Insurance Co., Ltd.
Burma Fire & Marine Insurance Co., Ltd.

Motor:

Batavia Sea & Fire Insurance Co., Ltd.
Fine Art & General Insurance Co., Ltd.

Life:

North British & Mercantile Insurance Co., Ltd.

Workmen's Compensation:

Fine Art & General Insurance Co., Ltd.

Baggage:

Fine Art & General Insurance Co., Ltd.

Surveying Agents for:

Nordduetsche Versicherungs-gesellschaft.

The Hamburg Lloyd Versicherungs-Aktien-gesellschaft.

Settling Agents for:

Amsterdam-London Verzekering My.

Rhenish Westphalian Lloyds.

Verzekering Maatschappij "Nederland"

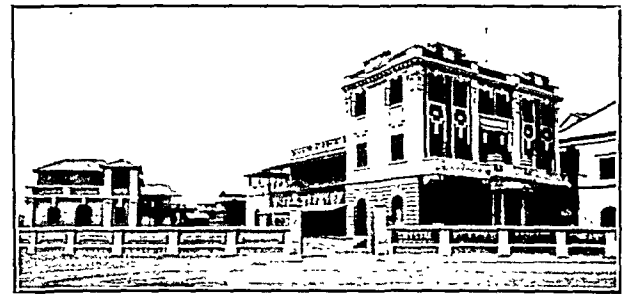
Messrs. Mallik, Thadhani and Co. are allied to Messrs. N. D. Mallik and Sons, and both have the same telegraphic address, "Malliksons," Karachi, and codes, A B C 5th and 6th editions, and Bentley's. The partners are Messrs. N. D. Mallik and T. S. Thadhani.

CRYSTAL ICE and COLD STORAGE CO., Kutchery Road.

PROBABLY no business in Karachi is more useful and highly appreciated than that of the Crystal Ice and Cold Storage Co., which was started in 1917, and is the largest concern of its kind there. The company's premises in Kutchery Road were specially planned and constructed for their present purpose, to which they are excellently adapted. The area occupied is 5,500 square yards, and the number of persons employed about 50. The ice-making plant is on the ammonia compression system, and its capacity is 45 tons of ice daily. The water used is obtained from the Municipal mains, and before being frozen is subjected to careful filtration. The product is sold wholesale at the rate of 60 lbs. per rupee, including delivery, and retail at half an anna per pound.

A feature of the business is its excellent cold-storage resources, which are well taken advantage of by local merchants for the accommodation of perishable commodities. There is no other cold-

storage undertaking in the whole of Sind or the Punjab. The managing director of the company




**PREMISES OF
CRYSTAL ICE and COLD STORAGE CO.**

is Mr. Kavasji K. Bhappu. The telegraphic address is "Crystalice," Karachi, and the code used is the A B C 5th edition.

**COOPER and CO., Steamship Agents, Freight and Exchange Brokers,
BEAUMONT and CO., Exporters of Hides and Skins, Insurance Agents and Attorneys,
P. and O. Building, Wood Street.**

THE business carried on under the name of Cooper and Co. was established in 1879 by Mr. W. Cooper, and after his death in 1904 it was continued by his brother-in-law, the late Mr. T. L. F. Beaumont, who was a member of the Legislative Assembly of India in 1920-21 and occupied at various times many of the important public positions, such as Chairman of the Karachi Chamber of Commerce, President of the Karachi Municipality, Consul for the Netherlands, and Consular Agent for France. Messrs. Cooper and Co. are steamship agents, freight and exchange brokers, and are agents for the Boase Spinning Co. (1920), Ltd., manufacturers of tarpaulins, Dundee, Messageries Maritimes and Robert Dollar Steamship Lines, and freight brokers to the Ellerman Lines, Ltd.

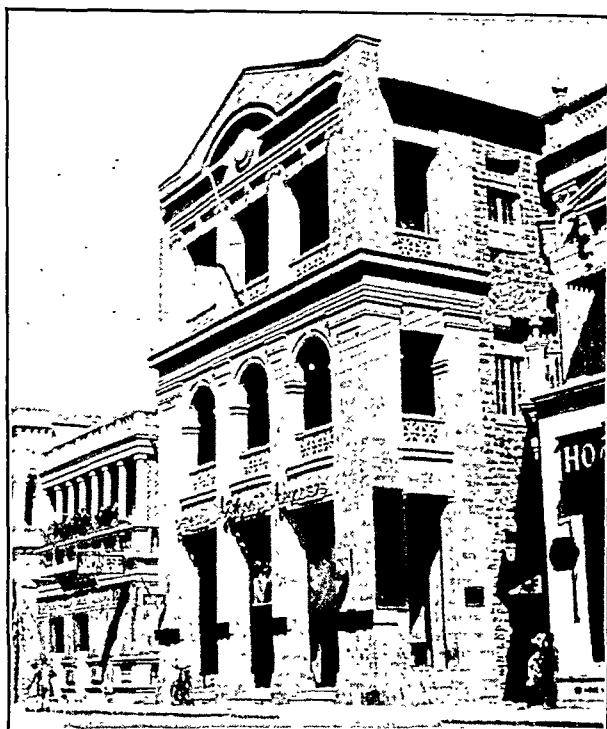
Mr. T. L. F. Beaumont founded in 1903 the firm of Beaumont and Co., exporters of hides and skins under the mark of , insurance agents, and attorneys. They are agents for the Royal Insurance Co., Ltd.; Eagle Star and British Dominions Co., Ltd.; The Eastern Insurance Co., Ltd.; and the Sind Cotton Press, Ltd.

The partners in both firms of Cooper and Co. and Beaumont and Co. are Mr. T. C. Beaumont, V.D. (son of the late Mr. T. L. F. Beaumont), Mr. E. L. Price, C.I.E., O.B.E., B.A. (Oxon), Barrister at Law, and Mr. Ian Graham. The telegraphic address of Messrs. Cooper and Co. is "Brocanter," and of Messrs. Beaumont and Co. "Beaumont," and the codes used by them are the A B C 5th and 6th editions. Scott's, Bentley's, and private.

BLISS and CO.,

Wholesale, Retail, and Manufacturing Chemists, Aerated Water Manufacturers, Elphinstone Street.

ELPHINSTONE STREET, Karachi's chief shopping thoroughfare, is chiefly composed of numerous small shops supplying goods of every description. There are, however, a few fairly large and up-to-date; but in all the town there is no establishment



SECTION OF PREMISES OF BLISS and CO.

catering to public requirements more worthy of note than that of Messrs. Bliss and Co., the well-known wholesale, retail, and manufacturing chemists and aerated water manufacturers, to whose handsome and commodious premises local residents may well refer with justifiable encomiums when comparisons are made between the shopping facilities and resources of Karachi and those of the other large ports dealt with in this volume.

MACDONALD and CO., Merchants, Insurance and General Commission Agents, Dunolly Road.

MESSRS. MACDONALD and Co., established in 1887, were amongst the first firms enrolled in the Karachi Chamber of Commerce. They have been in their present offices since 1903. They are amongst the chief local importers of piece-goods, and are the largest importers of cement, in which they have specialised for many years with marked success. They have also a large connection as general and insurance agents, and are agents for:

General Accident, Fire & Life Assurance Corporation, Ltd.
 Scottish Union & National Insurance Co.
 Eagle Star & British Dominions Insurance Co., Ltd.
 Yorkshire Insurance Co., Ltd.
 Canton Insurance Office, Ltd.
 Guardian Assurance Co., Ltd.
 Motor Union Insurance Co., Ltd.
 Union Marine Insurance Co., Ltd.

Started in 1896 in a comparatively small way, the business in question underwent very successful development, and eventually expanded beyond the accommodation provided for it. Accordingly the present premises alongside the former establishment were built specially for the firm and opened in 1919. The area occupied is 4,500 square feet. The front section comprises what is probably the largest and most impressive pharmacy in India, and is an excellent forerunner of the many other fine business places that will doubtless spring up in Karachi as the city's great evolutionary metamorphosis proceeds.

There is nothing associated with the modern pharmaceutical trade that is not procurable from Messrs. Bliss and Co. in large variety. The manner in which their extensive assortments of drugs, chemicals, patent medicines, perfumery, toilet articles, etc., is displayed, as well as the ornate appointments, conveys an air of superiority and professional specialisation that is in striking and pleasing contrast to the ordinary character of most of the pharmacies in India. In the dispensing department qualified English experts operate with meticulous regard for the absolute accuracy of all their operations and in materials fresh from the best sources of supply in Great Britain and elsewhere. The establishment is a special Kodak depot and also a special depot for the pharmaceutical goods of the world-renowned firm of Parke, Davis and Co.

At the back, and occupying nearly half of the well-built structure, is the firm's admirable aerated-water factory. The manufacture of aerated waters in India is carried on in many places quite unsuited for the purpose, which bear no resemblance whatever to the cleanliness and scientific organisation and equipment of Messrs. Bliss and Co.'s undertaking. The firm are contractors in that connection to the North Western Railway Co. on their systems between Karachi and Lahore and Lahore and Quetta, as well as to hospitals, messes, clubs, and hotels.

Martin, Pulverman & Co., Ltd., "Mullerite" Cartridges.

Bundi Portland Cement, Ltd., "B.B.B." Brand.

Gwalior Cement Co., Ltd., "Sun" Brand.

F. P. Baker & Co., Ltd., Army and East India Buying and Shipping Agents.

Newton Chambers & Co., Ltd., "Izal" Disinfectant.

Birkmyre Bros., Canvas and Paulins.

Bickford, Smith & Co., Ltd., Safety Fuse.

The proprietor of the business is Mr E. Arthur Miller, who succeeded his father (one of the founders of the concern), Mr. Edward Miller, on the death of the latter in 1917. Mr. Miller has made Mr. J. M. Dunbar a partner. The firm's telegraphic address is "Macdalan" or "Petra," and the codes used by them are the A B C 6th edition, Bentley's, and private.

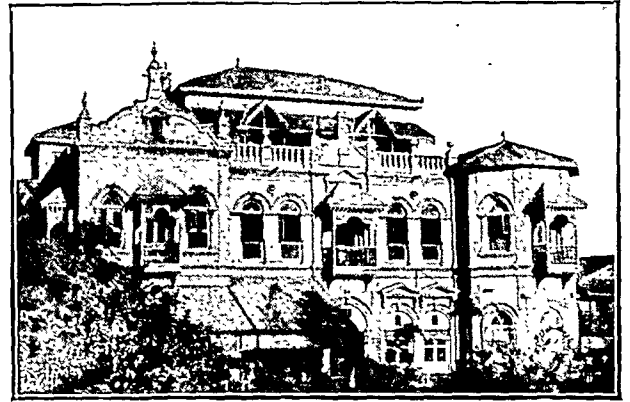
KILLARNEY HOTEL, Bleak House Road.

WERE it possible, it would be interesting to know why the excellent hotel indicated above received its title. Doubtless, it was for some sentimental reason; and after all sentiment is a factor to be reckoned with in the management of a hotel. At any rate, there is no other Killarney Hotel in India, so that the name is distinctive and unique there. Many people throughout that country and elsewhere know intimately and appreciate highly the comforts and advantages pertaining to the Killarney Hotel. It is a home from home, and quite different from the great establishments in the larger ports of India that are operated by limited liability companies and where guests do not come into contact with the proprietors. There has been a Killarney Hotel in Karachi for very many years. In 1922 Mr. S. Marder took over the present establishment, which had been previously a private mansion, and has admirably adapted it to modern requirements. It stands in pleasant garden grounds, where the profusion of green foliage is particularly welcome in arid, dusty Karachi.

The first attraction to be noticed at the Killarney is the delightful covered verandah which forms part of the dining-room. The tables look so inviting with their immaculate linen, glittering ware, and tastefully arranged flowers. The cuisine is spoken of in the highest terms, and is one of the reasons why it is not always easy to get accommodation at the Killarney; hence the wisdom of booking

rooms there well in advance. The other section of the ground floor is taken up by the entrance hall and drawing-room.

The building has two storeys, and the bedrooms



KILLARNEY HOTEL.

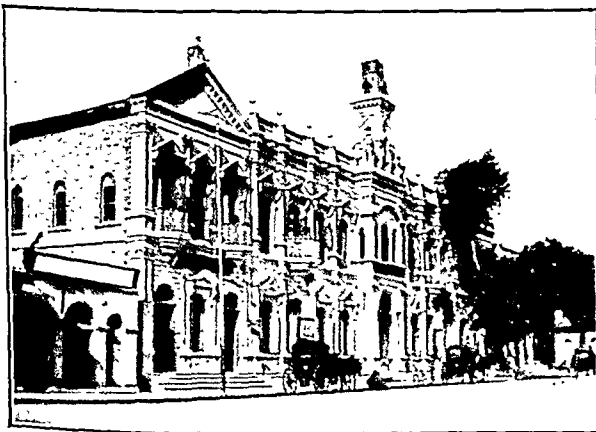
are unusually spacious. Some of the apartments are en suite and are excellently suited for families.

Besides the main building there are various annexes, and there is accommodation for between fifty and sixty people. The Killarney is under the personal supervision of Mr. and Mrs. Marder, who are unsparing in their efforts for the comfort and welfare of their guests.

A. HAJEE DOSSUL and SONS,

General Merchants, Commission Agents, Army Contractors and Auctioneers, Elphinstone Street.

No establishment in Elphinstone Street is more noteworthy than the large and handsome building of Messrs. A. Hajee Dossul and Sons, the well-known universal suppliers of Karachi. Their



PREMISES OF A. HAJEE DOSSUL and SONS.

large department store is impressive not only by reason of its architecture, but also because of the spaciousness of its interior and the variety of its supplies, which include almost everything pertaining to modern trade. While the articles procurable there are so comprehensive, nevertheless,

they are all selected by the firm with special reference to local necessities and preferences, while the prices at which they are sold represent the wise policy of small profits and quick returns. Provisions, toilet requisites, household utensils, electrical goods, leather articles, glass, china and aluminium ware, lamps, bedsteads, arms and ammunition, toys, etc., provide a range of selection well calculated to meet every need.

The various members of the prominent and influential Dossul family have been connected with the commerce of Karachi for about ninety years. The business of Messrs. A. Hajee Dossul and Sons was founded in 1840 by Mr. A. J. Hajee Dossul, and its story is one of steady and prosperous development. The original founder has been long deceased, and the present partners are Messrs. Abdul Latif S/O Haj Haroon, Abdul Sattar S/O Abdulla, Mohamed Hashim S/O Jan Mohamed, Abdula S/O Jan Mohamed, Mohamed Isaak S/O Jan Mohamed, Abdul Shakoar S/O Abdul Rihman.

Messrs. A. Hajee Dossul and Sons are also army contractors and auctioneers, and have the honour of special appointment to H. E. Sir Leslie Wilson, Governor of Bombay. Their telegraphic address is "Islam," and the codes used by them are the A B C 5th and 6th editions, and Bentley's.

**BURJORJEE COWASJEE and CO., Stevedores, Contractors,
Landing, Shipping and Forwarding Agents, Bunder Road, Opposite Merewether Clock Tower.**

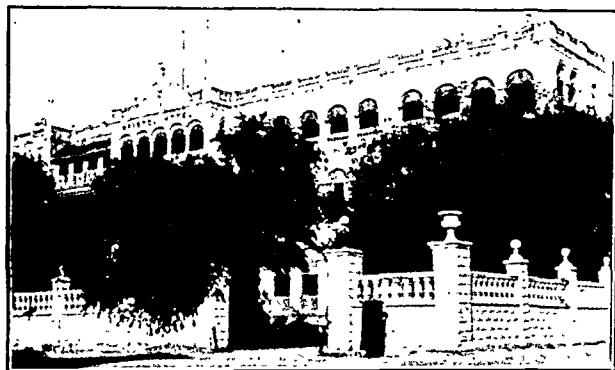
THE business of Messrs. Burjorjee Cowasjee and Co. illustrates admirably the enormous ramifications and requirements associated with the shipping trade, for to that trade they cater with knowledge and ability that have accrued as the result of their comprehensive experience thereof since they commenced business as stevedores, contractors, landing, shipping, and forwarding agents in 1890. What they do not know about their avocation may well be regarded as in the category of the negligible. Their well organised service includes the supply of provisions, hardware, paints and oils, and indeed everything pertaining to the complete outfit of a steamer. They have also excellent facilities and resources in connection with

all matters associated with the reception, storage, and despatch of cargo, and operate for many of the leading firms in India, including Messrs. Shaw, Wallace and Co.; James Finlay and Co.; Asiatic Petroleum Co., Ltd.; Burma Oil Co., Ltd.; Anglo Persian Oil Co., Ltd.; Gill and Co.; Langley and Co.; E. Spinner and Co.; Martin and Co.; Bengal Iron Works, etc.

The founder of the concern, Mr. Burjorjee Cowasjee, died in 1926, and it is now carried on by his nephew, Mr. Dorabi E. Shroff, and his cousins, Messrs. S. N. and F. R. Modi. The firm's telegraphic address is "Ratan," Karachi, and their codes are Watkin's Standard and Scott's (1916).

BRISTOL HOTEL, Bleak House Road.

THERE is probably no hotel designation more universal throughout the British Empire than that of the Bristol, and it would be very interesting to ascertain exactly the reason thereof. Like the



BRISTOL HOTEL.

ally of the bedrooms and verandahs on all the three floors, is in striking contrast to the necessitous economy that now obtains in all building operations. The person for whom the huge building was erected apparently had plenty of money to indulge in roomy expenditure as much as he desired. The spaciousness of the accommodation is the chief feature of the Bristol Hotel—huge bedrooms, each with its own big dressing room, separate white-tiled lavatory, and white-tiled bathroom with enamelled bath and wash basin and hot and cold running water. No hotel in India can beat the Bristol in these assets. The apartments open on to great balconies with handsomely tiled floors.

On the ground floor is the attractive lounge hall and reading-room, also a tastefully appointed drawing-room that is used for private dinner parties, etc., from time to time. The cuisine is excellent and all details of the management are under the personal supervision of Mr. and Mrs. Wysman. The worthy proprietor is the only Wysman in the East—so his numerous friends say; many of them are widely travelled and periodical sojourners at his hospitable place. He was manager of the United Services Club at Simla for eleven years before he took over the Bristol in 1921.

busy seaport on the Lower Avon, Karachi has its Clifton, a beautiful and popular seaside resort only a short drive from the Bristol Hotel, which is the largest hotel building in Karachi. That establishment was built as the mansion of a wealthy Parsi, and the extraordinary spaciousness of the interior arrangements, especi-

**THE INDO-PERSIAN TRADING COMPANY,
Import and Export Merchants and Manufacturers' Representatives, Ipeco Buildings, Victoria Road.**

NEVER has there been greater necessity for accuracy and knowledge, for skill and enterprise, than in these strenuous times. Competition is constantly increasing in every department of business and professional activity, and there is no room nor tolerance for mediocrity in service or supplies. Success is now only obtainable by exposition of the superlative in ways and means and the ideals behind it. In no country in the world is this great compelling force towards the highest achievements more impressively demonstrated than in Germany, where from the debacle of the Great War has

arisen a national combination of commercial and industrial effort that is as universal in its application and utility as the requirements of humanity. The ports dealt with in this volume, as well as the rest of the world, bear witness to the great and growing influence of German enterprise and ability in meeting local needs and the idiosyncrasies of specialised requirements in all markets. At Karachi, for instance, a very noteworthy example in that connection is afforded by the activities of The Indo-Persian Trading Co., from whom merchants throughout British India, Burma, Ceylon,

Afghanistan, Mesopotamia, Persia, etc., get their replenishings of stocks of merchandise of the most comprehensive character.

Those familiar with the commerce of Karachi need no introduction to the master mind behind the business in question, viz., Mr. Hans Forstner, who began operations there in 1902. When the Great War broke out the excellent concern which he had built up had, of course, to remain in abeyance; but when peace was restored to the shattered world, Mr. Forstner resumed his activities, and is now engaged on a greater scale than ever. He has branches and agencies throughout

prints and advertising materials, shoe and leatherware, glass, porcelain and earthenware, hardware and brushware, wine, beer and provisions, and the overwhelming medley of things sustaining the bazaar trade of India are supplied by The Indo-Persian Trading Co. with minute understanding of the psychology of the vast medley of the country's people and their preferences. The firm are representatives of a huge association of German and Continental manufacturers as well as of British and American houses, and their importations include almost everything pertaining to modern trade, from general sundries to machinery



TRADE-MARK OF THE INDO-PERSIAN TRADING COMPANY.

the countries mentioned, and is assisted by his sons and a daughter, each well trained in the intricacies of his flourishing business. The showrooms of the "Ipeco Buildings" represent a miniature Leipzig Fair. Therein may be seen large and interesting assortments of samples of the multifarious lines of German and Continental products, on the basis of which orders are registered for supply direct from the factories by collective shipments. Jewellery and precious metalware, clocks and watches, toys and fancy goods, celluloid, galalith and rubber goods, steel and ironware, tools and machinery, electrical goods, building materials and contractors' supplies, vehicles and sports requisites, furniture and travelling requisites, lampware, wooden and caneware, musical instruments, perfumery and chemicals, paints and varnishes, paper and stationery, art

of all kinds. They are also exporters of hides, skins, and animal products, and in that connection Mr. Forstner is an expert of unsurpassed knowledge, based on twenty-five years' experience. At the end of 1927 he took over most of the agencies of Messrs. Kerr, Tarruck and Co., who were one of the oldest firms at Karachi and had gone into liquidation.

Mr. Forstner is always on the lookout to extend his connections, and invites inquiries from overseas' firms desirous of entering the markets of India or extending whatever interests they may already have there. His bankers are the National Bank of India, Ltd., Darmstaedter and National Bank, and the Banco Nacional Ultramarino. His cable address is "Ipeco," Karachi, and he uses all the standard codes.

T. A. JEEWANJI and SONS,

Importers of Motor Cars, Oil Engines, Pumps, Hardware, Building Materials, etc., 223, Bunder Road.

THE largest and finest showroom for motor cars in Karachi is the one where Messrs. T. A. Jeewanji and Sons display the Morris-Oxford and Morris-Cowley cars, and Robson oil engines, for which they are sole local dealers. But the fine showroom is only a portion of that firm's premises, which occupy an area of 2,200 square yards, and accommodate a stock of materials of the most comprehensive description, including an exceptionally large assortment of spare parts and accessories for the cars mentioned, as well as for the Ford vehicles, and also the Robson oil engines.

During the Great War Messrs. T. A. Jeewanji and Sons rendered excellent service to the Government by the supply of motor cars and spare parts,

which they sent chiefly to Busra and Chaklala. From 1914 to 1925 they were the Karachi agents for the Ford Motor Co. until that concern opened its own branch at Karachi.

Besides operating with enterprise and ability in everything pertaining to the motor trade, Messrs. T. A. Jeewanji and Sons are also large suppliers of materials and tools of all sorts for use in connection with the construction of buildings, roads, bridges, railways, Municipality and irrigation purposes. They have been established since 1912. Their telegraphic address is "Enginstore," Karachi, and the codes used by them are the A B C 5th and 6th editions, and Bentley's.

**T. COSSER and CO., LTD., Engineers, Ironfounders, Contractors, Metal Merchants,
Head Office and Godowns: Wood Street; Workshops: McLeod Road.**

THE founder of the business of Messrs. T. Cosser and Co., Ltd., Mr. T. Cosser, arrived at Karachi in 1859 in order to take charge of the mechanical works of the railway then being constructed in Sind. There were no wharves nor landing stages at Karachi at that time, and the handling of heavy railway materials was a most tedious operation, taxing to the fullest extent the patience as well as the skill of all concerned in development. Incidentally it may be added that the principal commercial houses of the city now stand upon what was originally nothing but a huge swamp.

In the year 1866 serious floods did considerable damage to the line, and partially wrecked the fine bridge over the Malir River, about nine miles from Karachi, carrying away several of the piers and spans. Mr. Cosser was contemplating a return on leave to England when that calamity occurred, but he was approached by the agent and chief engineer of the railway with a view to his taking up the contract for the repair of the bridge and for raising the structure a further six feet in order to safeguard it from future damage by floods.

In partnership with Mr. D. Mackenzie, Mr. Cosser undertook the contract, which he carried out successfully, and he subsequently founded the first engineering works at Karachi under the name of Mackenzie, Cosser and Co.

Shortly afterwards they built the Scotch Church and reconstructed a portion of the Napier Barracks.

The firm then began to build canal bridges and sluices, and to carry out other works of a similar character for the Public Works Department. In 1873, when a commencement was made with the construction of the Indus Valley Railway, they secured contracts for dealing with earthworks. The partners subsequently went farther afield and executed contracts in Beluchistan and on the Harnai Railway, between Sibi and Quetta. While the latter work was in progress in 1875 Mr. D. Mackenzie died, and Mr. Cosser then carried on the business on his own account. In 1882 he entered into an undertaking to construct the Merryweather Pier, which was the first development of Karachi as a port, and the foundation stone of this structure was laid by the Marquis of Ripon, then

Governor-General of India. Following this, special attention was devoted to the business in the direction of marine engineering, and an extensive trade was carried on in the building of barges. But the erection of structures in the town was not neglected. Amongst these were the Sind Club and the lighthouse at Manora; while an active part was also taken by the firm in connection with the water supply and drainage of Karachi.

Messrs. T. Cosser and Co., Ltd. (incorporated in 1909), have constructed very many of the oil tanks of the big oil companies' installations in Sind and elsewhere, a considerable proportion of the buildings in connection with the Lloyd Sukkur Barrage Project, and many roofings of the buildings of the Karachi Aerodrome.

The firm have done much important work in the Punjab for the Public Works Department, and their connections with the military extend to the frontier of India.

Their works in McLeod Road occupy an area of nearly four acres, and are equipped with a plant that embraces the most modern machine tools for the manipulation of iron and steel in every way. The equipment includes electric as well as oxy-acetylene welders, hydraulic presses, power hack saws, pneumatic hammers and riveters, and indeed practically everything that has been invented for the perfection of process and result in metal and wood working.

The company's other premises in Wood Street and Queen's Road occupy an area of about six acres, and are devoted chiefly to the firm's activities as constructional engineers. The transportation facilities of these premises are greatly facilitated by the connection which runs into them from the main line of the Great Western Railway. Resources of considerable magnitude are also presented in the various stores for all kinds of iron and steel, pumps, machine tools, and general engineering requirements supplied by the company.

Mr. T. Cosser died in 1921. The directors now are Messrs. W. D. Young, Chairman; W. R. Carstairs, O.B.E., Managing Director; and R. H. Young, Secretary. The company's telegraphic address is "Cosser," Karachi, and they use Bentley's code.

**SALLEH MOHAMED OOMER DOSSAL,
Bankers, Merchants, and Commission Agents, Napier Road.**

THE business carried on under the name of Salleh Mohamed Oomer Dossal is one of the largest Mohamedan undertakings in Karachi, and has been established since 1870. The head office is in Napier Road, and there are branches of it at Bombay, agencies in Persia, Arabia, Java, and Mauritius, and representatives all over India. The firm are well-known bankers, merchants, and commission agents. Their imports consist chiefly of

grain, sugar, piece-goods, dates, molasses, etc., and their exports are grain, sugar, cotton, seeds, etc. Messrs. Salleh Mohamed Oomer Dossal are sole agents in Sind for Sir Jacob Behrens and Sons, manufacturers of woollen goods, Bradford. They are likewise agents for the Arab line of steamers. The senior proprietor is Mr. Oosman Salleh Mohamed and the other partner is his nephew, Mr. Yussuf Haji Abdul Ahim.

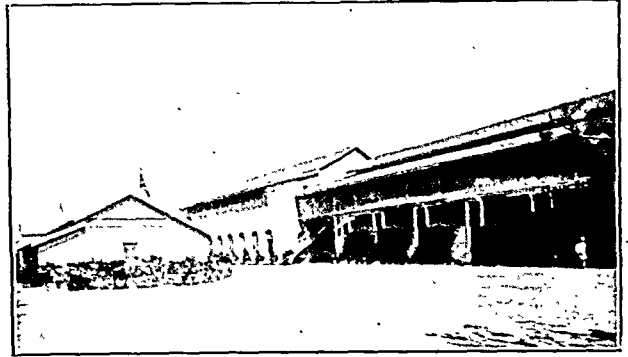
CARLTON HOTEL, Bonus Road.

No one who visits Karachi can be unaware of the Carlton Hotel that is such a well-known institution of the town and a very noteworthy contribution to local assets and amenities. It is not always easy to obtain accommodation at the Carlton, and wise people arrange for their rooms there well in advance, for the place is very popular. The reason for that popularity will be at once apparent to everyone who stays there—it is so clean and comfortable, so quiet and homelike, and the food is first-rate in quality, variety, and service. The Carlton is utterly different from the great, noisy hotels of large cities. It is a home from home, a place of refreshing, unbroken sleep, a place to work or dream in without disturbance by the distressing sounds and conditions that are so prevalent throughout the Orient.

The attractions of the Carlton are sustained and enhanced by the fact that the worthy proprietress, Mrs. Croal, personally superintends every detail of her establishment, which, accordingly, provides a pleasing contrast to the hotel of the ordinary limited liability company whose chief concern is the dividend, and the directors of which know little if anything of the infinity of apparent trivialities that in the aggregate make or mar success in catering to public requirements.

The quaint general *ensemble* of the building forming the Carlton is the result of gradual development from a very modest beginning. Thus, for instance, the little sitting-room in the building facing the main structure used to be the dining-

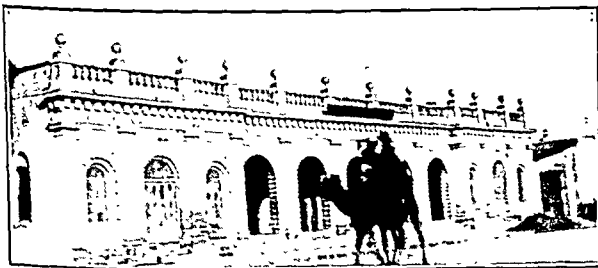
room, and is vastly different from the large dining-room which, on Saturday nights presents a gay scene when dancing is in progress. The atmosphere of the Carlton is one of refinement—so many notable people go there, and the signatures in the guest-book are very interesting.

**CARLTON HOTEL.**

The hotel is very conveniently situated, being exactly opposite to the Cantonment Railway Station and near to the Sind Club, the Gymkana, and the polo ground. It has been under Mrs. Croal's supervision since 1915, and was previously known as Reynold's Hotel. It is not very large—it has only 47 bedrooms; but they are all well arranged and nicely furnished; a number of them are *en suite*, and all have their own bathrooms and electric lights.

**BYRAMJEE EDULJEE, Wines and Spirits, Groceries and Provisions,
Manufacturers of Aerated Waters and Ice, etc., Victoria Buildings, Victoria Road.**

It is good to be engaged in a business that is of great utility, for many people obtain their living by activities that could well be dispensed with and the time and energy spent on them diverted to

**PREMISES OF BYRAMJEE EDULJEE.**

since 1870, when it was founded by the gentleman whose name it bears, and who died in 1911. It is now conducted by his sons, Messrs. Framjee, Ratonjee, Ardeshir, and Pirozshaw Byramjee Eduljee, who worthily uphold the traditions and ideals by which their highly respected father attained success.

The firm are noted for the variety as well as the high-class quality of their supplies, and their comprehensive catalogue is a pleasing enlightenment regarding the thoroughness with which they operate, containing, as it does, the names of practically everything of the best that can be mentioned in connection with provisions and wines and spirits, etc.

Messrs. Byramjee Eduljee's premises, occupying an area of about 2,200 square yards in Victoria Road, form one of the most noteworthy combinations of essential supplies in Karachi. One section, for instance, is devoted to the manufacture of aerated waters and non-alcoholic drinks of every description. The water is obtained direct from the town supply, and conveyed to settling and filtering tanks, where it is passed through a superior germ removing filter and led direct to the machines in pure tin-lined pipes. It is thus untouched by hand

better purposes. In the multifarious spheres of operation by which the commerce and industry of Karachi and the other ports of India are sustained, there is none more necessitous and commendable than one like that carried on under the name of Byramjee Eduljee—an undertaking that plays an important and influential part in the routine of many of the local homes. The business has been familiar in connection with commissariat supplies

throughout the entire process. The bottles are washed in special tanks by an ingenious contrivance, and finally rinsed with filtered water direct from the pipes. The gas used is absolutely pure, and all essences, syrups, etc., are prepared according to the British Pharmacopœia. Consequently, the firm are able to guarantee the absolute purity of their productions, and this purity is further impressively endorsed by the reports and certificates which they have received for the purity and high quality of their waters from various places of eminent authority, including the Institute of Hygiene, London; the London School of Brewing and Chemistry Laboratory, London; and the Grant Medical College, Bombay.

Another part of Messrs. Byramjee Eduljee's premises comprises a factory, equipped with an up-to-date plant of machinery, for the manufacture of ice from pure filtered water and with a productive capacity of thirty tons daily. Another factory is under construction which will also have a capacity of thirty tons.

Victoria Building, as the premises are called, likewise has attractive refreshment rooms and a bar.

The firm are Army, Navy, and Government contractors, and have branches in the city and at

Keamari. They are sole proprietors of S. F. Wyeed's condiments, which are well known throughout the world, and are also sole agents in Karachi for:

Girard & Co., Tonnay Charenté, France, Brandies.
Charles Wright & Sons, London, Scotch Whiskies.
Donald Fisher & Co., Edinburgh, Scotch Whiskies.
Alex. Duff & Co., Glasgow, Scotch Whiskies.
Fisher, Macdonald & Co., Glasgow, Scotch Whiskies.
Muir, Mackenzie, & Co., London and Glasgow, Scotch Whiskies.
Kinross, Douglas, & Co., London and Glasgow, Scotch Whiskies.
Thompson, Taylor, & Co., London and Glasgow, Scotch Whiskies.
W. Teacher & Sons, Liverpool, Scotch Whiskies.
Ronald Campbell & Co., Liverpool, Scotch Whiskies.
Alex. Andreae Kraay & Co., Bordeaux, Wines.
Gonzalez, Byass & Co., London, Sherries.
A. C. A. Nolet & Co., Holland, Geneva.
C. N. Kopke, Oporto, Port.
Rigold & Bergmann, Germany, Pilsener Beer.
W. E. Johnson & Co., Beer and Stout.
Hayward, Tyler & Co., London, Aerated-Water Machinery.
W. J. Bush & Co., London, Essential Oils and Essences.

Kousanie Tea Co., Ltd., Gumaon.

The telegraphic address of Messrs. Byramjee Eduljee is "Byramedco," Karachi, and the codes used by them are the A B C, 5th edition, and Bentley's.

HOAR and CO.,

Tailors and Ladies' and Gentlemen's Complete Outfitters, Elphinstone Street.

THE headquarters of Messrs. Hoar and Co. are at Bombay, and are described on page 252. Their branch at Karachi is one of the largest shopping resorts in that town; it occupies an area of 10,000 square feet, and gives employment to about fifty persons. The activities carried on there are meant to convey very much more than can be expressed in stereotyped phraseology. Everything has its expression, elaborate or simple, readily understood or difficult of perception. The garments produced by Messrs. Hoar and Co. are meant to express the delight of the superlative in sartorial art as well as in practical utility. They are turned out with conscious pride of their merit for individuals able to differentiate between superiority and inferiority, who are all fastidious about the little details beyond the consciousness of the unobservant and the uninitiated. It is the fastidious dresser who can best appreciate the fabrics and workmanship

associated with the business—the man of discernment and consequence, whose personality radiates knowledge and efficiency. So it is ever in the matter of clothes, good clothes that fit perfectly because perfectly made and of perfect materials. Suits are made by Messrs. Hoar and Co. at their Karachi branch in twelve hours, if required, under the supervision of an expert London cutter. At Bombay the firm confine themselves entirely to gentlemen's tailoring and outfitting; but at Karachi they are enterprising ladies' outfitters also, and in their departments devoted to feminine requirements the latest fashions are seen in captivating dresses, millinery, and all the charming details of the apparel of the fair sex. Messrs. Hoar and Co. opened their Karachi branch in 1912, and it is in charge of a practical English manager, whose courteous attention makes shopping there a pleasure.

THE SIND TYPEWRITING CO., Wholesale Paper Merchants and Stationers, etc., Bunder Road.

Not many decades ago clerical work was conducted by methods that had remained practically unchanged for centuries; and the waste of time and effort which resulted in that connection was never realised until vividly demonstrated by the new inventions which soon followed each other with surprising rapidity, and relegated former ways to the limbo of the obsolete. The great evolution in question led to the formation, in 1907, of The Sind Typewriting Co., whose activities are very much more comprehensive than the restrictions

suggested by their name. They are large importers of papers of all sorts, strawboards, book-binding cloth, and every article of stationery. They have in the vicinity of their premises in Bunder Road another establishment where they operate as general printers and bookbinders. The firm have connections throughout India, and employ a staff of travellers who tour all over the country. Their telegraphic address is "Typexperts," and the codes used by them are the A B C 5th edition and Bentley's.

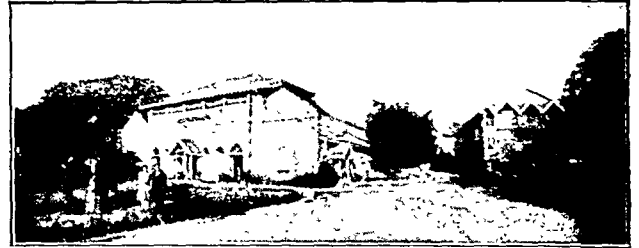
ADELPHI HOTEL.

UNTIL November, 1927, the Adelphi Hotel was not regarded as amongst the best hotels in Karachi. Certainly the elite did not go there, and the commercial travellers of consequence, who are and should be the best judges of hotels, did not give it as their address during the period of their sojourn in the town. It served a useful purpose in its way, doubtless, but not one that was proclaimed with enthusiastic appreciation. Since then, however, a great change has been effected as the result of the advent of the hotel's new owner, Mr. Joseph Failla, an American gentleman with nearly thirty years experience of hotel keeping, who is certainly manifesting in his control of the Adelphi all those details of good management that are greatly appreciated, especially in India, where so much is left to the haphazard attention of native employees.

The situation of the Adelphi is exceptionally advantageous, being at the end of Karachi's chief shopping thoroughfare, Elphinstone Street, and close to the principal clubs, theatres, etc. The land occupied is about two acres, and is nicely laid out. The hotel has accommodation for about twenty-five persons, and comprises two separate buildings in which everything has been brought into line with modern requirements, including sanitation. Thus, the Adelphi is the only local hotel with electric call bells in each room. All the apartments also have their own bathrooms

with modern baths and running water and are comfortably and suitably furnished.

Amongst the improvements effected by Mr. Failla is the new dining-room on the upper floor of the front building, and it opens into a balcony attractively appointed with easy chairs

**ADELPHI HOTEL.**

and couches. The floor of the new dining-room is covered with high-quality fibre matting as in Japan, and the artistic as well as utilitarian effect is further enhanced by other coloured matting on the walls in the form of a dado. The old dining-room still remains on the ground floor, and in con- the walls in the form of a dado. The old dining- this being a greatly appreciated feature that is not possessed by any other hotel in Karachi. It has also the unique distinction in Karachi of possessing an orchestra that plays every evening from 8 o'clock till 11.30.

THE C. and I. ENGINEERING COMPANY,

Machinery Importers, Manufacturers and Exporters, Tabilram Khemchand Road.

THE interpretation of the name of the business indicated above is The Commercial and Industrial Engineering Co. While operating as machinery importers, manufacturers, and exporters, the firm's chief activities are devoted to oil-expellers and oil-mill machinery, and in that connection they have developed an important service that is growing in influence and appreciation throughout India, where hundreds of factories have been equipped with their celebrated specialities. Amongst these is the famous Anderson oil-expeller, for which the C. and I. Engineering Co. are chief agents in India.

The capacity of one Anderson expeller ranges from 450 lbs. per hour on shelled groundnuts to 800 lbs. on copra and other materials in proportion. The operation is simple, automatic, and continuous. After the seeds are cleaned they are elevated, or put by hand, into the machine, and there pressed in a perforated steel cylinder in which revolves a series of steel screws mounted on a shaft, and so arranged as to produce a gradually increasing pressure. This pressure has been found by experiments to be 20,000 lbs. per square inch on the material, nearly seven times as much as is exerted by the hydraulic press, and this without any expensive and space-filling accessories necessary to a hydraulic press.

Another advantage of the Anderson expeller is that the material can be pressed whole, i.e., without grinding, though for best results a roller-mill is recommended. So successful has the Anderson oil-expeller proved that many spurious imitations have come upon the market. In every case these cheap machines have never equalled the capacity of the Anderson expeller; and the high percentage of oil left by them in the cake makes them very much more expensive in the long run than the Anderson expeller.

The C. and I. Engineering Co. are always pleased to give to interested persons a basis account for an expeller-mill, showing the monthly working expenses and the monthly income, on the basis of which anyone can find out what will be gained or lost by the installing of an expeller. Roughly, an Anderson expeller will earn Rs. 500 to Rs. 2,500 per month at an outlay of from Rs. 15,000 to Rs. 25,000 on the plant and Rs. 20,000 on seeds.

The company's excellent service includes the advice and assistance of trained engineers of long and extensive practical study and experience of the Anderson expeller. They also lend the services of graduate chemists for advice on chemical problems of the oil industry, and have a training school for operators and managers.

They also supply crude-oil engines, boilers, filter presses, seed cleaners, seed crushing rollers, elevators, shafting, gearing, belting, and everything required for a complete installation of an oil-exPELLER mill. They submit drawings and designs of plants and also detailed drawings for erection to suit existing mills; and, they keep one or two machines always available for trial. Furthermore, they claim to be the only firm in India supplying and erecting oil-refining, deodorising, decolourising, and oil-hardening plants from the smallest units to the largest size.

The C. and I. Engineering Co. have been established since 1917, and have a branch at 36-38, Hummum Street, Bombay. Their telegraphic

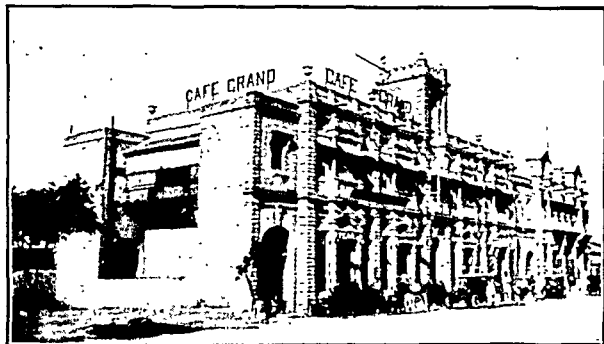
address for both Karachi and Bombay is "Efficient," and their codes are the A B C 5th and 6th editions, Bentley's, Blitz, and private.

The managing proprietor is Mr. H. N. Pherwani, who is a well known writer and worker for the economic as well as physical and spiritual welfare of the people. He is the principal of a technical institute at Sukkur, and the founder of the National Life Building Institute, President of the Bhatia Sewa-Sammitti, and Secretary of the Shikarpur Panchayat. Professor S. N. Pherwani was a partner in the business for five years and is now retired. He was the Professor of Sociology and Civics at the University of Bombay.

A. C. CUMPER,

Proprietor of the CAFÉ GRAND, Victoria Road, and the CENTRAL HOTEL, Merewether Road.

SITUATED in the heart of the European section of the city, the Café Grand is a popular place for refreshments of all kinds. That, however, is only a minor phase of its utility, for Mr. A. C. Cumper,



CAFÉ GRAND.

its proprietor, is the leading baker and confectioner in Karachi, and his productions, including sweets of all kinds, are of a quality that challenges comparison with the best imported.

The services of Mr. Cumper as a caterer are well taken advantage of and highly appreciated for weddings, dinners, parties, and festive occasions of every description. His facilities and resources in that connection are admirable, and

everything committed to his trust is carried through with the ability accruing through long experience of the work.

Mr. Cumper is also proprietor of the Central Hotel, which is one of the best establishments of that kind in Karachi. With its annexes it has accommodation for twenty-five persons, and is fitted up for the utmost comfort and convenience, including modern sanitation. Each of the bedrooms has its own bathroom with running water. The cuisine is excellent in every way, and the hotel, lighted throughout by electricity, overlooks the Gymkana, and, like the neighbouring Café Grand, is in the centre of the European social activities.

Mr. Cumper has been in the catering line all his business career. His first experience of it out of England was with the British Army during the Egyptian campaign of 1885, when he was entrusted with the headquarters mess. Thereafter he proceeded to India, and started in business for himself at Mussoorie, branching out eventually at Lahore, Rawalpindi, and Murree. In 1915 he established himself at Karachi, where he is assisted by his sons, Herbert and James. Another son, Mr. A. E. Cumper, is in business for himself in the same line at Quetta.

A. K. MANDVIWALA, Metal and Hardware Merchant, Bunder Road.

THE leading metal and hardware merchants in Karachi are nearly all Mohamedans, and most of them have their offices in Bunder Road. Amongst such undertakings is the business of Mr. A. K. Mandviwala, which is one of the largest of the kind in the town. It was established in 1861 by the gentleman whose name it bears, grandfather of the present proprietor, Mr. T. A. Mandviwala, who worthily sustains the traditions and ideals by which his grandfather and father carried on their trade and won the esteem of all with whom they

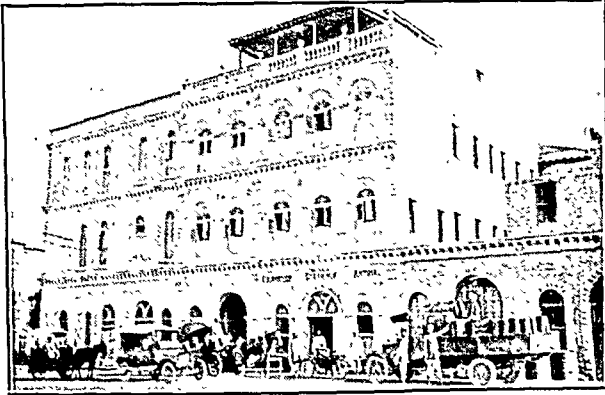
came in contact. Mr. Mandviwala supplies Government and military departments, Indian States, railways, municipalities, etc., and has very widely spread connections in India and Europe. He is agent for the Standard Oil Co., of New York. His telegraphic address is "Steelbeams," Karachi, and the codes used by him are the A B C 5th and 6th editions, and Bentley's. His son, Mr. Gulamal T. Mandviwala, is agent in Sind and the Punjab for the Goodyear Tyre Co.

GHULAMHUSEIN EBRAHIMJI ANTARIA and SONS,

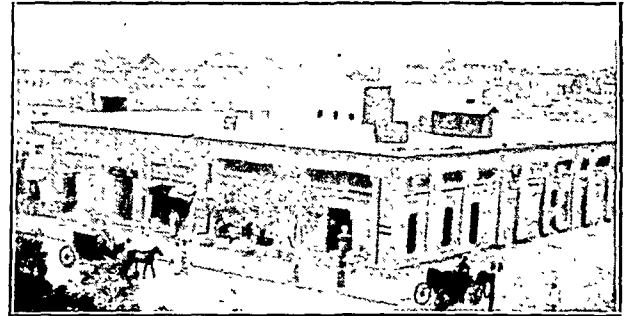
Importers of Hardware, Mill Stores, and Engineering Tools, etc. Head Office: Marriot Road.

KARACHI is noteworthy for the numerous well-known Indian firms who have been established there for many years. Amongst these are Messrs. Ghulamhusein Ebrahimji Antaria and Sons, whose

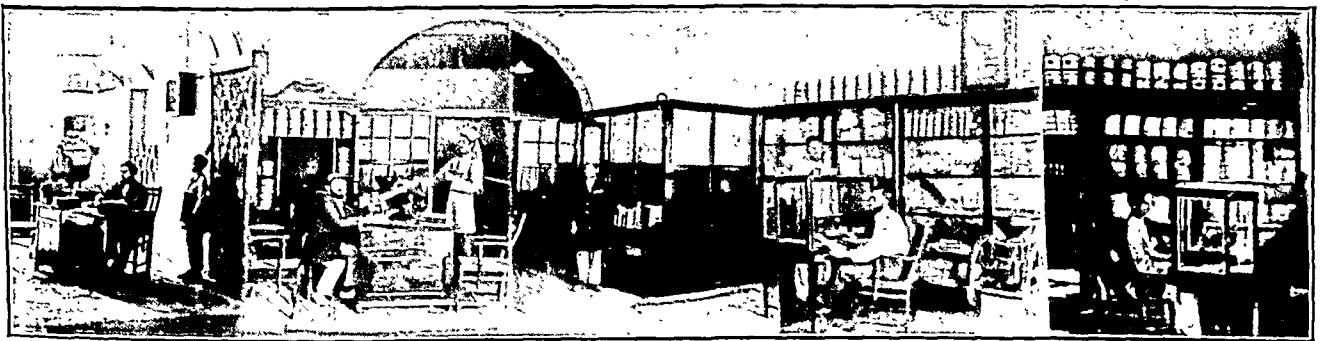
a place which is so much in the making as Karachi, and accordingly they transact an extensive trade there as well as throughout Sind and the neighbouring provinces. Their head offices are in Marriot Road, and they have branches in Bunder Road and Old Jail Road. They are sole agents in



OLD JAIL ROAD BRANCH OF GHULAMHUSEIN EBRAHIMJI ANTARIA and SONS.



BUNDER ROAD BRANCH OF GHULAMHUSEIN EBRAHIMJI ANTARIA and SONS.



HEAD OFFICES OF GHULAMHUSEIN EBRAHIMJI ANTARIA and SONS.

business was founded in 1858, and is one of the largest of the local concerns devoted to general hardware, mill stores, engineering tools, and sundries. The firm's supplies are exactly suited to

Sind for The Rossendale Belting Co., Bradford. Their telegraphic address is "Shabir," Karachi, and the codes used by them are the A B C 5th and 6th editions, Bentley's, and private.

J. B. ADVANI and CO., LTD.,

Importers of Paper and Printing Materials, Stationers, etc., Mangaldas Road.

MESSRS. J. B. ADVANI AND CO., LTD., specialise in the importation of paper and printing materials of every description, including type and machinery, as well as stationery, and are amongst the leading firms in that connection in India. Accordingly, by their service and supplies they have done and are doing much for the enhancement of typography and its allied activities in Karachi and elsewhere, for, devoting special attention, as they do, to the lines mentioned, they are better able to meet all kinds of requirements therein than would otherwise be possible. They are, for instance, sole agents for:

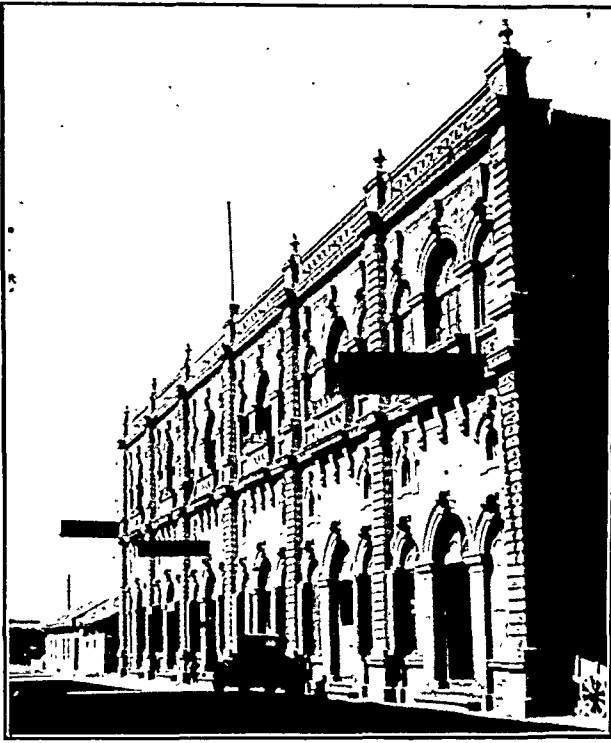
R. K. Stevens & Co., Ltd., London; Types.
Karl Krause, Leipzig; Printing Machinery.
Slater & Palmer, London; Manufacturers of Printing Inks.

M. M. Vetter & Co., Leipzig; Printing Machinery.
Gebruder Brehmer, Leipzig; Printing Machinery.
Golding Mfg. Co., Franklin, Mass.; Printing Machinery.
Rockstroh-Werke A. G., Heidenau; Printing Machinery.
Holliston Mills, Inc., Norwood, Mass.; Binding Cloth.

The business was started in 1908, and the firm was formed into a limited liability company in 1925. The Managing Directors are Messrs. K. P. Malkani, Vasanmal K. Malkani, Jethmal T. Lalvani, and B. B. Advani. Branches of the concern are established at Lahore, Bombay, and Madras, and the firm's travellers tour throughout India. The telegraphic address is "Premier," at Karachi, "Bondpaper," at Bombay and Madras, and "Treadles," at Lahore, and the codes used are the A B C 5th and 6th editions, Bentley's, and Universal.

**THE HAYDN COMPANY, Piano Manufacturers and Importers of Musical Merchandise,
Dundas Street.**

If music is Love hunting for a word, the vocabulary of The Haydn Co. is very expressive, and in that language of sweet sounds and harmonies



PREMISES OF THE HAYDN COMPANY.

which requires no interpretation anywhere in the world. They may rightly be called the minstrels of Sind as well as suppliers of all that scientific

knowledge and skill have achieved in the production of everything pertaining to the finest of the fine arts. Their stock of musical merchandise is certainly most comprehensive, and every mail brings to them the latest music productions. They provide musical instruments of every description with the exception of those made of brass, which is ruined in appearance by the local climate, and has as its substitute electro-plate or silver. Pioneers and chief representatives of their trade in Karachi, their long experience and knowledge thereof finds demonstration in their service and supplies. They are actual manufacturers of pianos, and their staff of workmen includes experts whose lifetime has been devoted to the construction and repair of pianos; so that it is not surprising that the Haydn pianos substantiate their popularity, for they are built specially to withstand the ravages of the local climate and of materials best adapted for the purpose.

The Haydn Co. are also importers of foreign pianos, including the well-known Chappell, Broadwood, and Brasted of English make, and those by Schieemayer and Soehnes and Julius Feurich, Germany. The company are also agents for "His Master's Voice" records and Deccas gramophones, and their excellent premises, covering an area of 2,600 square feet, include an auditorium, where customers may hear their records before purchase.

The business was established in 1889 by a syndicate and has been managed since 1904 by Mr. Theodore C. de Sousa, who is one of the most experienced men in his trade in the Orient.

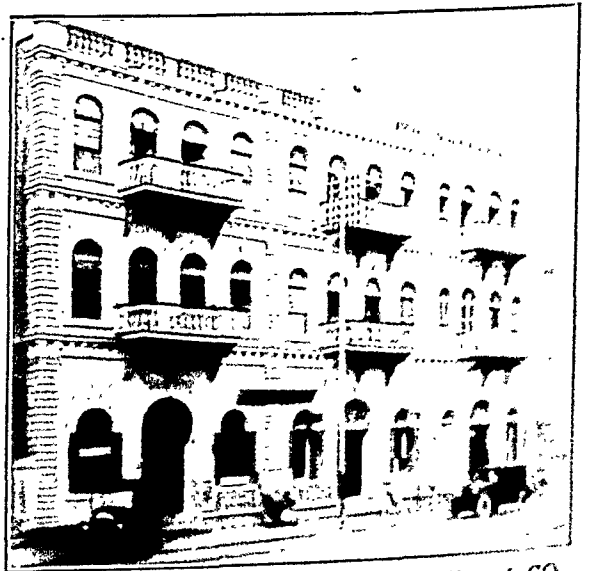
MERWANJI EDULJI and CO., Automobile Importers and Engineers, Garden Road.

MESSRS. MERWANJI EDULJI AND Co. are sole distributors in Sind, Baluchistan, Persia, and Afghanistan of the famous Fiat and Chrysler cars, which are very popular throughout India and the neighbouring countries as in all other parts of the world. They keep, of course, a large stock of spare parts and accessories, and by means of their staff of skilled workmen and excellent equipment they are in a position to execute repairs of all kinds very speedily and efficiently.

The business was founded in 1915 by Mr. Merwanji Edulji, who owns considerable property in Karachi, including more than 200 acres of land along the railway lines. He is also managing partner in the well-known firm of engineers and contractors, Messrs. Pallonji Edulji and Co., who have their headquarters in Charni Road, Bombay, and a branch in Bunder Road, Karachi. That firm are selling agents for the Indian Cement Co., of Messrs. Tata, Sons and Co.

Messrs. Merwanji Edulji and Co., have a branch at Bushire, Persia, under the management of Mr. Godrej Merwanji, son of Mr. Merwanji Edulji, and sub-agencies at Duzdap and Teheran, also in

that country. They own and operate the business carried on under the name of Kandawalla and Co., described on page 368.



PREMISES OF MERWANJI EDULJI and CO.

**PATEL and SONS, Optical Supplies, Scientific Instruments, Dental Supplies,
Cinema Requisites, Films and Slides, Elphinstone Street.**

THERE are many degrees of utility in modern business undertakings. Many could well be dispensed with, and the time, effort, and money expended on them very advantageously diverted to more useful directions. There is, however, no disputing the fact that the varied activities of Messrs. Patel and Sons are in the category of the highest service. Their business was started in 1899 by Dr. K. B. Patel as a pharmaceutical concern, but eventually the firm turned their attention to all kinds of optical supplies and scientific instruments. Dr. Patel's son, Dr. M. K. Patel, qualified as a dental surgeon in the United States, and is the only dentist in India with the German qualification of Dr. Med. Dent. While he has established a flourishing practice as the leading dentist in Karachi, he is also a manager of Patel and Sons. He looks after their large and growing department devoted to the supply of dental goods of all kinds, and is editor of the *Indian Dental Review* published by them.

Another very important department is the one dealing with all manner of cinematograph requirements. Another of the founder's sons, Mr. D. K. Patel, is at present studying cinematographic science in Germany, for the firm have very ambitious projects in connection with the potentialities of the cinema in India for the education and general uplift of the people. Thus they were the founders and are the directors of the EDUCATIONAL PICTURES CORPORATION, whose highly commendable objects are excellently dealt with in the pamphlet on *Education by Visualisation* issued by the firm, together with a relative circular letter from which the following is an extract:

"Education is the greatest need in India. The progress of the home, the society, the institution, and the country depends on the knowledge and the acquisition of useful arts and sciences, the means and the methods of disease prevention and health promotion, and the general understanding of our

surroundings and the world at large. It is a recognised fact that the information conveyed by the moving pictures (the cinema) register more effectively, and consequently they are more lasting, more convincing, and more easily grasped than the ones through the ear. The modern development and the extent of the use of educational films in the advanced countries of Europe and America are enough indications of the vast scope and the importance of film lessons and film education.

Educational Pictures Corporation is organised to provide the facilities of education by visualisation. It is the first and the only one of its kind in India, equipped with the most select, interesting, and instructive films on various subjects. It has secured these films from the best educational film producers of America and Germany.

Apart from the educational importance of our films in educational institutions of all grades and kinds, they provide the most interesting items of entertainment and education in home, zennana, public gatherings, social functions, religious ceremonies, club meetings, annual conferences, etc., where, very often, money is unnecessarily spent, yielding no gain either in education or in useful instruction."

Educational Pictures Corporation are the sole agents for Safety Projector Co., Inc., U.S.A., "Zenith" Portable Cinema Projectors, Homelite Corporation, U.S.A., Bruno Knittel, Germany—portable and travelling cinema.

After the return of Mr. D. K. Patel from Germany and the United States, the firm intend to make their own educational films under Government as well as public patronage.

Messrs. Patel and Sons are also established at Lahore (The Mall). Their cable and telegraphic address at both Karachi and Lahore is "Patel-sons," and the codes used by them are Bentley's, and the 5th and 6th editions of the A B C.

**YUSAFALI ALIBHOY KARIMJI and CO.,
General Merchants and Commission Agents, 726, Napier Road.**

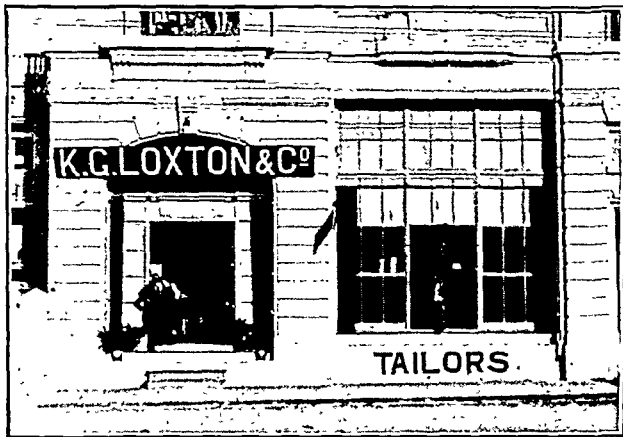
THE Mohamedan mercantile element in Karachi is excellently represented by the large and well-known firm of Yusufali Alibhoi Karimji and Co., who have been long and influentially connected with local commerce. Their business, under its present name, was established in 1896 as an offshoot of another undertaking of the same family that had been carried on since 1855.

Messrs. Yusufali Alibhoi Karimji and Co. are large importers of piece-goods and merchandise of every description, and export big quantities of grain to Ceylon, Mauritius, and the ports of the Persian Gulf. They have well established connections at Bombay, Calcutta, Colombo, and in Mauritius and East Africa. They are agents for

Messrs. Muller and Phipps, the well-known firm of manufacturers' representatives, who contribute considerably to the trade of most of the ports in the Orient. Messrs. Yusufali Alibhoi Karimji and Co. are also agents for the Western Assurance Co., Ltd., Eagle Star and British Dominions Insurance Co., Ltd., and Gross, Sherwood and Heald, Ltd., paint manufacturers, London. The partners in the firm are five brothers, as follows: Messrs. Yusufali Alibhoi Karimji Alavi; Gulamhusain Alibhoi Karimji Alavi; Tyebali Alibhoi Karimji Alavi; Mahomedali Alibhoi Karimji Alavi; Abdulkader Alibhoi Karimji Alavi. The telegraphic address is "Yusafali."

K. G. LOXTON and CO., Civil, Military and Sporting Tailors, Victoria Road.

STYLE is clothes is the general effect which everybody notices, produced by careful exactness in



PREMISES OF K. G. LOXTON and CO.

many details which pass unobserved. One person may spend a great deal of money on dress, and

yet not have that dressy distinction which is so much desired; while another person may spend only a very small amount in the same direction and exemplify sartorial perfection and good taste. It all depends on the way clothes are made. A good fit in inferior material is better than a bad fit in the best cloth. A perfect fit in superlative material is the policy by which is conducted the business of Messrs. K. G. Loxton and Co., who are keen and skilful exponents of everything contributing to the highest tailoring ideals. They know well how to embody every elegance of style distinction in clothes; and the workmanship that emanates from their premises is equal in all respects to the most fastidious tastes and requirements. The firm's establishment is very nicely appointed and in keeping with their high-class trade.

The business was started in 1925 by Messrs. S. G. Loxton and K. G. Punvani, who previously had long experience with some of the leading tailoring firms in the Bombay Presidency.

J. C. MISQUITA and CO.,

Furniture and General Merchants and Auctioneers, Misquita Building, 39, Somerset Street.

THE subtle influence exerted by furniture in every home is not amongst the things usually considered or realised, but is, nevertheless, a potent factor in life's daily routine, and has a psychological importance on which much could be written. Thus articles of comparatively little intrinsic worth, but of frequent or long use or possession, become prized beyond any standards of financial value.

Furniture requirements in Karachi are well supplied by Messrs. J. C. Misquita and Co., who have been operating in that connection for more than forty years, and the local homes containing their productions must indeed be numerous. A prominent feature of their business is their specialisation in letting out furniture on hire for

any period. This is a great boon to people whose stay in Karachi is of comparatively brief duration, and who are able to equip their temporary homes at a minimum of expenditure, which would otherwise be impossible.

Messrs. J. C. Misquita and Co. are also noteworthy for their enterprising activities in connection with the supply of catering requisites, such as furniture, glassware, earthenware, cutlery, etc., and many an important festive occasion is made successful by means of their facilities and resources in that direction. They are, furthermore, auctioneers, and at their periodical sales dispose of property of every description.

THE STANDARD BOOKSTALL, Elphinstone Street, etc.

MR. CHAINRAI VALIRAM, the proprietor of the business carried on under the name of The Standard Bookstall, started it in 1914 with a stock valued at about 1,500 rupees, and the success he has attained may be indicated by the fact that his average stock at any time now in the neighbourhood of two lakhs of rupees. An achievement like that is all the more noteworthy in view of its accomplishment by means of the supply of literature and kindred requirements, such as fancy goods, picture frames, etc., generally associated with similar undertakings. Mr. Valiram has various establishments—three at Karachi in Elphinstone Street, Daily Gazette Building, and the Rest Camp, and others at Rawalpindi, Murree, Simla, Delhi, and Peshawar.

The books he supplies cover every branch of

literature, grave and gay, fact and fiction, instructive and amusing. Novels especially, by the best-known authors, receive particular attention by him; while in newspapers, magazines, and periodicals of all kinds his business is one of the largest in India. Mr. Valiram is prepared to supply to order regularly any periodical from any part of the world. His undertaking is certainly a very useful one and contributes a noteworthy part to the routine of life in the places where it is so well established, providing by its service and supplies the means to escape from ennui and weariness and to keep in touch with the world's happenings in every line of activity. The telegraphic address is "Bookstall," and the codes used are the A B C 5th and 6th editions, and Bentley's.

J. MANIKRAI and SONS,**Manufacturing Jewellers, Silversmiths, Diamond and Precious Stone Merchants, Elphinstone Street.**

PROBABLY few of the many people who pass the premises of Messrs. J. Manikrai and Sons are aware of the comprehensive character of that firm's activities and the extremely interesting departments where these are carried on. The commodious front shop is practically all that the public sees of this noteworthy business; but, nevertheless, the variety of the stock there will be greatly enhanced in attraction when it is known that a very large proportion of it is of the firm's own manufacture. Consequently, no better place can be found in Karachi for mementoes of Sind or gifts for special occasion than Messrs. J. Manikrai and Sons' premises, where the allurements to purchase are many and insidious in the form of exquisite designs in silver plate and jewellery of every description.

In the workshops at the rear highly skilled experts, aided by ingenious machinery and contrivances of all kinds, carry on their respective activities, each being a specialist in some particular line, and devoting his life thereto. Messrs. J. Manikrai and Sons are manufacturers of all kinds of trophies and presentation plate, and made caskets, etc., that were presented to H.M. the King Emperor and very many of the most prominent notabilities visiting India. The wide scope of their operations includes silver and electroplating, gilding, engraving, and repairs of every

description; and the fact that the firm are the holders of the highest awards conferred on any Sind jewellers speaks more eloquently of their ability than columns of stereotyped encomiums.

The business, which gives employment to about 35 persons, was started in 1891 by Mr. J. Manikrai,

**PREMISES OF J. MANIKRAI and SONS.**

who died in 1919. It was thereafter carried on by his son, Mr. S. Manikrai. The latter was recently joined in its management by his brothers, Messrs. G. A. and S. H. Manikrai. The firm's telegraphic address is "Brilliant," Karachi, and they use the 5th and 6th editions of the A B C code.

J. S. de SOUZA and Co., Furniture Manufacturers, Elphinstone Street.

ESTABLISHED for about forty years, Messrs. J. S. de Souza and Co. are the largest manufacturers of furniture in Karachi, and the comprehensive stock in their premises in Elphinstone Street is well calculated to meet the most varied require-

ments. Furniture is made there to order in any style, and the fidelity with which the details of any period furniture are reproduced by the firm's skilled workmen is worthy of the highest commendation.

THE AUTO EXPRESS, Bunder Road.

THE business carried on under the name of The Auto Express was established in 1927 by Mr. H. A. Bhavnani, who had been general manager of a large firm of merchants, bankers, etc., established since 1845 at Karachi. When that concern went into liquidation Mr. Bhavnani took over the assets of the preceding firm mentioned. Thus it was that the name of The Auto Express came into the arena of local enterprise, especially in connection with the motor trade, in which excellent progress is being made. The Auto Express are agents for the Chandler (American) cars, keep a large stock of spare parts and accessories, and employ a staff of about ten skilled men for the execution of all kinds of repairs, etc. The telegraphic address of The Auto Express is "Liberty," Karachi, and the code used is the A B C 6th edition.

**PREMISES OF THE AUTO EXPRESS.**

P. R. SETNA, Automobile Engineer, Victoria Road.

MR. P. R. SETNA knows more about motor cars than about anything else pertaining to modern commerce and industry. All his business activities are in connection with them, and no one in Karachi understands better than he what it is that makes, or does not make, the wheels go round. He is a great specialist in repairs of every description. Vehicles often arrive at his well equipped premises in Victoria Road apparently beyond redemption, but when they undergo the skilled attention of Mr. Setna and his experienced engineers they not infrequently leave better than they were origi-

nally. There is nothing in that connection which Mr. Setna is not prepared to undertake, and he claims to have in operation some machinery without duplicate in the town. He builds motor bodies of all kinds, and for painting he has a Duco spraying equipment.

Mr. Setna was trained in one of the largest automobile engineering establishments in Bombay, and was in business for himself at Mooltan for five years before he started at Karachi in August, 1927.

THE KARACHI ELECTRIC STORES

Merchants, Contractors, and Engineers, 82, Bunder Road.

AN idea of the remarkable variety of equipment and the very comprehensive range of utility which has been evolved in connection with the utilisation of electricity is afforded by the supplies of The Karachi Electric Stores. There is apparently nothing which can be suggested in relation thereto which that firm are not prepared to supply, from the smallest utilities to the largest contracts, for besides being merchants they are contractors and engineers, always on the alert to extend the scope of their operations and to enhance their reputation by workmanship and materials of the best quality at the most moderate prices. The firm transact an extensive wholesale trade up country, and have a traveller constantly touring in their interests throughout India.

The business was started in 1910 by Mr. Shewaran P. Vallicha, and carried on by him until

his death in 1921. The present proprietors are his sons, Messrs. Matiram and Dipchand S. Vallicha.

The firm's telegraphic address is "Bijli," Karachi, and they use Bentley's code.

They are sole selling agents at Karachi for:

- "American" flashlights and batteries.
- "Columbia" dry cells, hot shot batteries, radio batteries, projector carbons, carbon brushes.
- "De Veau" telephones.
- "Farady" gongs.
- "Pr" bells and buzzers.
- "American" gasoline lamps and lanterns.
- "Signal" electric fans, bells, buzzers, gongs, and medical apparatus.
- "Helios" pocket lamp cases.
- "Excelsior" batteries.
- "Pertrix" batteries.

PREMIER CLOTHING CO., Gentlemen's Tailors and Outfitters, Elphinstone Street.

THE person who is content to wear cheap and ill-fitting clothes cannot be regarded as being an exponent of that superlative attitude of mind and development which is never satisfied with mediocrity or inferiority, but ever reaches out towards the best in ways and means, in thoughts and things. Anyone in the latter category will find in the Premier Clothing Co. a very commendable firm of tailors thoroughly well qualified to demonstrate in all work entrusted to them the best sartorial traditions and ideals, and to interpret with clever and minute understanding all those apparently trivial but important details which are created and sustained by idiosyncrasy of measurement and preferment as well as fashion. The Premier Clothing Co. do not operate along the lines of standardised uniformity that is so characteristic of machine-made goods and that takes no cognizance of the infinite variety of the *genus homo* in outline and suitability to prevailing styles. Theirs is the skill which is manifested in a multi-

plicity of considerations which separately may be negligible, but collectively result in the perfection of fit and fashion that at once commands attention; and they are just as adept in the making of riding breeches and military and other uniforms as in the production of the orthodox suits for the office and the home.

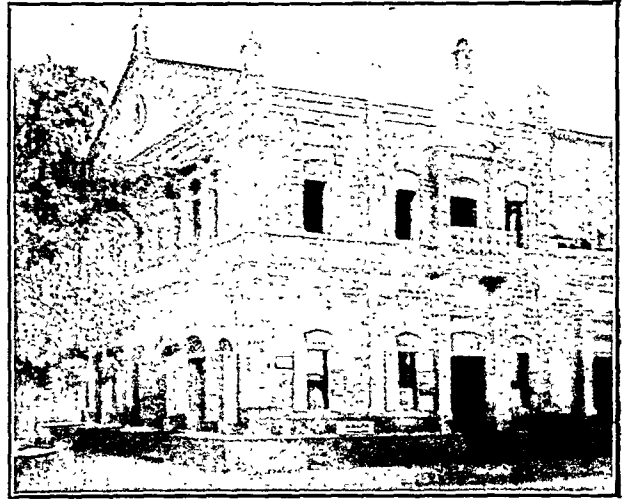
The company's establishment is one of the most noteworthy in the town for gentlemen's outfitting goods, and is on a higher scale of service and completeness than might be inferred from its somewhat prosaic exterior. They are keen students not only of current modes but also of the adaptability of their supplies to the necessities of the local climate, and consequently their stock is well calculated to appeal to every gentleman to whom good dressing as well as comfort is a matter of importance. The firm specialise in suits, shirtings, headwear, neckwear, hosiery, and men's shoes. The business has been established since 1924.

I. SEQUEIRA, Artist and Photographer, Inverarity Road.

PHOTOGRAPHY in all its branches is admirably exemplified by Mr. I. Sequeira, whose manifest ability in it is the result of a lifetime devoted to its study and practice. This highly esteemed gentleman studied for three years at the Jamsetjee Jeejeebhoy School of Arts, Bombay. In 1885 he was appointed Drawing Master at the Grammar School at Karachi. After serving in that capacity for three years he joined the Locomotive Department of the North-Western Railway as mechanical draughtsman; but, always a lover of photography, started in business on his own account in that connection in 1900, and soon became noted for the excellence of his productions.

Mr. Sequeira's premises, which are his own property, are equipped in a very complete manner with everything that can contribute to the perfection of process and result, and his abundance of backgrounds and all accessories enables him to give very artistic effects to his photos. He is the official photographer to H.H. Sir Imam Buksh Khan Talpur, G.C.I.E., Mir of the native State of Khairpur, in Upper Sind. Mr. Sequeira owns the land behind his premises and also the Adelphi Hotel, also valuable property in the district of

Karachi known as Cincinnatus Town. He is a director of the Indian Life Assurance Co., Ltd., Indian Flour Mills, Ltd., and the Union Press,



SECTION OF MR. I. SEQUEIRA'S PREMISES.

Ltd. Mr. Sequeira is an enthusiastic stamp collector, and his collection of Ceylon stamps is well known.

GOKALCHAND TARACHAND and SON.

Importers of Cycles and Accessories, Sewing Machines, and Wines and Spirits, Bunder Road.

THE cycle is the safest and the least expensive of all means of mechanical locomotion, and probably the time will never come when that useful and popular method of transportation will not be in use. In few towns is there greater scope for cycling than in Karachi with its widely spread area. The principal cycle business there is the one owned and operated by Messrs. Gokalchand Tarachand and Son, whose premises in Bunder Road are well known and patronised for cycles and

everything pertaining to them. That firm are sole wholesale representatives for India and Burma for the celebrated Coventry Challenge cycles. They are also agents for Naumann sewing machines, Jardine's Scotch whisky, Cordon's French brandy, and the International Milk Products Export (condensed milk).

The business has been established since 1878, and the head office is at Quetta.

ARDESHIR JAMSEDJI KHAN and CO., Diamond Merchants and Jewellers, Elphinstone Street.

AMONGST the most attractive establishments in Elphinstone Street for people desirous of obtaining



PREMISES OF
ARDESHIR JAMSEDJI KHAN and CO.

goods of quality at minimum prices is that of Messrs. Ardeshtir Jamsedji Khan and Co., which is particularly commendable for its jewellery and silver articles. Similar places in the other ports of India and other countries are also, as a rule, sources of supply of watches and clocks; but Messrs. Ardeshtir Jamsedji Khan and Co. do not handle these, and confine themselves entirely to jewellery and silver and electro-plated goods. Their specialisation in that connection will, therefore, be all the more appreciated by visitors desirous of securing novel and artistic designs as mementoes of local skill. In addition to these the firm also keep an interesting variety of imported goods. Their business was established in 1877 and their telegraphic address is "Khanco," Karachi.

KANDAWALLA and CO., Automobile Importers and Engineers, Bunder Road.

THE motoring area of Karachi is not extensive, and in that respect the city differs from the other chief seaports of India. However, cars are an absolute necessity at Karachi, for the town is very scattered, and accordingly there are established there one or two excellent firms of automobile engineers. Amongst them must be mentioned Messrs. Kandawalla and Co., who have been attending to public requirements in that connection since 1915. The premises in Bunder Road are well equipped with machinery for repairs and service of every description. They are sole distributors in the Bombay Presidency, Sind, Punjab, Baluchistan, and East Persia for the Hudson Super Six and Essex Super Six cars, and keep a large stock of spare parts and accessories for these well-known vehicles. They are also agents

for the Federal trucks in Sind, Punjab, Baluchistan, and the whole of Persia, and agents for the Minerva cars in Sind, Punjab, and Baluchistan. The business was founded in 1915 by its senior partner, Mr. Merwanji Edulji, referred to in the article on Messrs. Merwanji Edulji and Co. on page 362. Mr. Edulji is assisted by his sons—Mr. Byram Merwanji, who looks after the firm's branch in Queen's Road, Bombay, Mr. Kaikhushroo Merwanji, who runs the branch in The Mall, Lahore, and Mr. Bezon Merwanji, who attends to the firm's interests at Karachi. Messrs. Kandawalla and Co. are extending their branches and sole agencies throughout India. Their telegraphic address is "Pious," and they use Bentley's code.

R. JALBHOY,**Photographic Artist and Dealer in Photographic and Artists' Materials, Elphinstone Street.**

THE enormous development in photography finds expression in the great variety of things which have been invented for the simplicity as well as perfection of that art in all its most charming and useful phases. The materials pertaining thereto are found in great variety and completeness in the establishment of Mr. R. Jalbhoy, who specialises in their supply with knowledge based on long and practical experience of everything associated therewith. He is agent for the celebrated goods of Kodaks, Ltd., Houghton Butcher (Eastern), Ltd., Winsor and Newton, Ltd., and Illingworth and Co., Ltd., London.

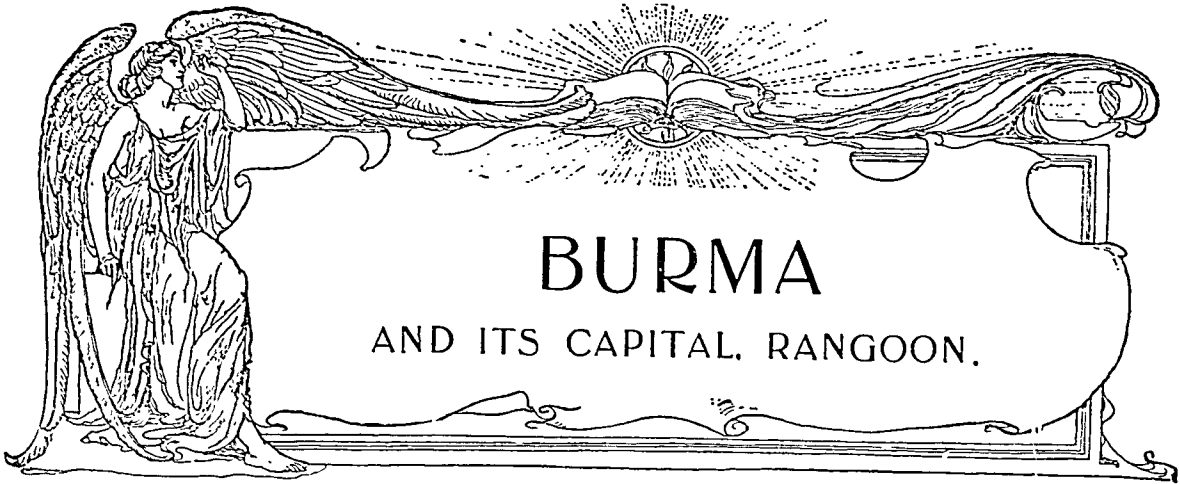
In addition to his merchandising activities Mr. R. Jalbhoy is also a photographic artist of noteworthy ability, as is demonstrated by the many

excellent examples of his skill to be seen in his premises, from miniatures up to life-size portraits. He has taken photographs of the King and Queen at the time of their visit to India in 1905 as Prince and Princess of Wales, also of the present Prince of Wales in 1922, and of various Viceroys, Governors, Commanders-in-Chief of India and other prominent persons.

The business was established about forty years ago by Mr. R. Jalbhoy, and since his retirement in 1920 it has been carried on by his son, Mr. S. R. Jalbhoy, who has been assisting his father for the last twenty-five years. The telegraphic address is "Jalbhoyco," Karachi, and the code used is the A B C 5th edition.



INDIAN CONJURERS AND SNAKE CHARMERS.



IS EXCELLENCY, Sir Harcourt Butler, the first Governor of Burma, in his address to the new Legislative Council, on February 3rd, 1923, at Rangoon, said: "Burma is a good country for an optimist. Favoured by Nature, it has vast undeveloped resources, a fertile soil, a wealth of minerals, great forests, large waterways, a population amongst the most attractive in the world, and amongst the best educated in the East."

Many have read Kipling's "The Road to Mandalay"; a few know where the Marquis of Dufferin and Ava's second title comes from; Rangoon rice and Burma oil have a fame of their own, the second largely because it helped the growth of the Anglo-Persian Oil Company, the child having now outgrown the parent; and those who deal in teak are aware that the best quality of that timber comes from Burma's forests; but to how many is Burma known except in a vague, picturesque way as the Silken East, the land of pagodas, where Buddhism prevails as a pleasant religion among a people who are called "The Irish of the East"? There is still plenty of beauty and romance in Burma; the people deserve Sir Harcourt Butler's high praise of their attractiveness and high standard of literacy; and the daily life of the people is still largely dictated by conditions such as the waxing and waning of the moon, the auspicious or inauspicious days and the like, which we superior Westerners deem "mere superstitions"; yet Burma has its material side, actually prosperous, potentially capable of great development, and the happy care-free Burmans mean to share in that growth, for they have a keen eye to the main chances. It is not that they "try to make the best of both worlds," but that they understand the best

way to "gain merit" for the future lives is to do the right thing in this life; and how can one do the right thing, whether it be to feed the monks or build a well, without money? The Burman loves beautiful colours, fine materials, sparkling jewels (for his wife, seldom for himself) and all the other evidences of prosperity; while the rain-soaked lands of the Irrawaddy delta yield paddy almost without effort. He knows that there are other things worth looking after in his land, and he is out to have some share in the profits that will come from their development. If he succeeds, well and good; if he does not, then well and good also; for, at least, he has made the effort. His Karma was against him; he has conquered some of it; for, in Buddhism, intention counts no less than performance as a means of "gaining merit." Burma, "the Cinderella province of India," differs from India as Belgium differs from Spain; and the association may end in the first case as long ago it ceased in the second.

Burma's association with the British Empire dates from 1824, when troops from India arrived at Rangoon on a punitive mission which lasted until 1827. The result of this, the First Burmese War, was the occupation of Arracan (adjoining Eastern Bengal) and Tenasserim (adjoining Siam), the withdrawal of the troops from Rangoon following the conclusion of peace with the Burmese sovereign. In 1852 occurred the Second Burmese War, which resulted in the acquisition of Lower Burma, the Burmese king's sovereignty not extending south of Toungoo after that date. Thirty-three years later the Third Burmese War took place as the result of the cruelty practised at the court of King Thibaw at Mandalay, for which his chief wife, Supayalat, was considered responsible. The whole of Upper Burma, from Toungoo northward to the Tibetan frontier, and from the Arracan Yomas eastward to the borders of Southern China, French Indo-China and Siam, was then added to the British Empire.

Between 1826 and 1852 the two widely separated areas of Arracan and Tenasserim made comparatively little progress; although a hospital was built at Akyah on the conclusion of peace.

The acquisition of Lower Burma, with the important port of Rangoon, in 1852, marked the beginning of great progress: and the addition in 1886 of Upper Burma has been followed by still greater developments, until now the province is one of the richest parts of the Indian Empire, and its future is regarded with the utmost confidence.

Topography and Agriculture.

The total area of Burma is 236,738 square miles. It is a land of mountain ranges and long rivers. Three ranges spread out fanwise from



[Photo: D. A. Ahuja and Co.]

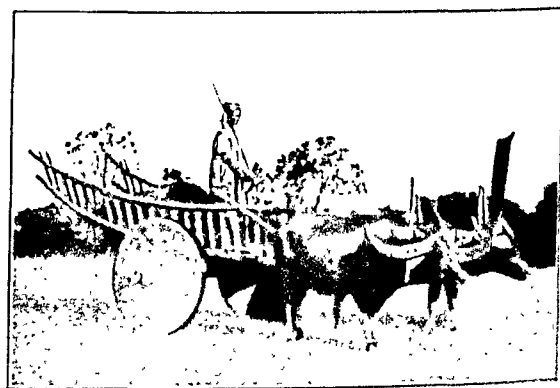
BURMESE FESTIVAL CART.

the north. The Arracan Range running from the north to the south-west cuts off Arracan from the rest of Burma. From the north to the south-east the Shan Hills, ending in Tenasserim, form the eastern boundary. Between these two the Pegu Range divides the province into two halves, drained respectively by the Irrawaddy and the Sittang Rivers.

Throughout Lower Burma the south-west monsoon gives such an abundant rainfall that rice, the staple food of the whole province, can be grown without irrigation and without fear of failure; and the deltas of the two rivers form the great rice-growing tract. The gross cropped area in Lower Burma is over 9 million acres, and of this over $8\frac{1}{2}$ million acres are cultivated with rain-fed rice. To the north of the deltaic districts, a tract of diminishing rainfall gradually merges into the dry zone of Upper Burma. Here the surface is undulating or hilly and the country arid, with large stretches of barely cultivable or wholly uncultivable rock and sand. Dry crops predominate, and in the Myingyan district, in the centre of the dry zone, out of a total cropped area of over 7,000,000 acres, less than 50,000 acres are under rice. North of the dry zone come the hilly districts of Upper Burma, in which the rainfall is heavy and rice is again the predominating crop. Natural conditions and the lack of population, however, prevent its being grown on a scale in any way comparable with that of the delta districts. In Upper Burma as a whole rice covers somewhat

more than a third of the entire crop area of 6 million acres. About half of this area depends on irrigation, and the rest, except in the hill districts, is very liable to failure. In Burma, therefore, the two extremes of tropical agriculture are touched. There is in Lower Burma a vast area of secure rice land dependent solely upon rainfall, and in Upper Burma land as poor and as insecure as can be found in any part of India.

The Arracan division and part of the Tenasserim division passed under English rule in 1826, the rest of Lower Burma, including the whole of the Irrawaddy and Sittang deltas, in 1854, and Upper Burma in 1886. The delta country, now so closely peopled, when taken over was an almost uninhabited swamp. Nearly twenty years later it could still be described as "a large tract of waste land with a few patches of gradually increasing cultivation scattered about." Anyone could appropriate as much or as little waste land as he liked by the act of cultivating it. He could sell, mortgage, or let it, and his heirs succeeded to his interest; but if he quitted it another man could take it up and the rights of the former were extinguished if the newcomer occupied the land for ten years without objection from the previous occupant. That was the only tenure recognised under British rule, and, for nearly twenty years from the occupation of Pegu, a population, largely consisting of fishermen, salt-boilers, itinerant traders, and potters, cultivated for home consumption patches of a few acres in the jungle, shifting almost annually.



[Photo: D. A. Ahuja and Co.]

BURMESE VILLAGE BUFFALO CART.

In 1869 the Suez Canal was opened, and almost immediately an export trade in rice grew up, accompanied by a striking increase in the population, in the area cultivated, and in the area of individual holdings. This abrupt change in agricultural conditions was signalled by the export of rice by steamers through the Suez Canal for the first time in 1872. Although in three of the eight years ending in 1869-70 the export of rice had been stopped by famines in India and China, the average of the period was only 363,000 tons. In 1870-71 the total reached 440,000 tons, in the following year 487,000 tons, and in the two succeeding years

720,000 and 811,000 tons respectively. Steam rice-mills were erected in increasing numbers. In 1867 there were only three such mills in Burma. By 1872 the number had risen to twenty-six. A large annual immigration of coolies from India began. At first they worked in the mills, but afterwards took to agricultural labour. There was a change even in the kind of rice generally cultivated. In the early days the bulk of the exports had been the soft-grained rice most valued in China and for home consumption; but this would not stand shipment to Europe, and a hard-grained variety took its place. In 1870 the area under rice was 1,712,030 acres. During the following year it only rose by 21,785 acres, but in 1871-72 by 102,200 acres. Then for upwards of thirty years the average rate of increase exceeded 150,000 acres a year. Agriculture was no longer carried on primarily for home consumption, but for export; and it is a distinctive feature in the agricultural economy of Lower Burma that almost the whole country has been brought under cultivation by small cultivators producing for an export market. The rapid growth of cultivation led to elaboration of the revenue system; but, before suitable machinery had been organised, the attention of the Government was distracted by the annexation and subsequent pacification of Upper Burma.

In Upper Burma the conditions of agriculture were very different from those of Lower Burma, the tenures were complex, the crops numerous, and the harvest precarious. But the revenue system was built up by officers who had served in Lower Burma, and naturally reflects their experience and traditions. The difficulties of adapting Lower Burma practice to conditions so different absorbed much of the energies of revenue officers, and the problems of Lower Burma receded somewhat into the background. When they again became prominent the position had altered greatly. Over large areas the pioneer cultivator had succumbed to the large landlord or money-lender, cultivating a big estate by an agent or leasing it to tenants. An agricultural revolution had occurred, and the shifting cultivation for home consumption, which characterised the delta until 1870, and been replaced by industrial agriculture, leading up to the position now found in the more developed areas where labour for earthwork, ploughing, the digging up of seedlings, planting them out, the herding of cattle, the reaping, threshing and carting of paddy are all separate operations performed by different people, and the division of function has proceeded almost as far as is possible in agriculture. More recently, with the development of commercial crops, a similar tendency has been noticeable in Upper Burma.

The growth of the rice trade of Burma reads almost like a romance. It is curious to note that in the early statistics, which were doubtless very incomplete and unofficial, no mention is made of rice, the staple food grain of the province and for years past its chief article of export. In an old circular issued in 1858 by a Calcutta firm it is

stated that in that year the exports of rice from Rangoon had attained considerable dimensions and were showing a very rapid increase. They sprang from *nil* in 1853 to 112,561 tons in 1858. Development of the rice-milling trade began in the seventies, and, as methods improved, production was increased, and trade with Europe developed. Before the Great War large exports of rice were made to Germany in connection with that country's starch and brewing industries. Some two million tons of rice annually and even more have, in recent years, been available for export.



[Photo: D. A. Ahuja and Co.
BURMESE PLOUGH.]

Apart from rice, Burma produces other crops, such as cotton, rubber, ground-nuts, beans, and chillies, the export of which is mainly through Rangoon. The province seems suited for the growth of rubber, and the present output represents steady growth despite prices which have pressed very hardly on plantations in other countries. Much attention has been given by the Government to the fostering of agriculture, and a new Agricultural College is being built at Mandalay for the double purpose of research work and of educating Burmans in agriculture for the time when they will be able to take almost complete charge of that branch of administration. Shellac and cutch are also exported.

Timber.

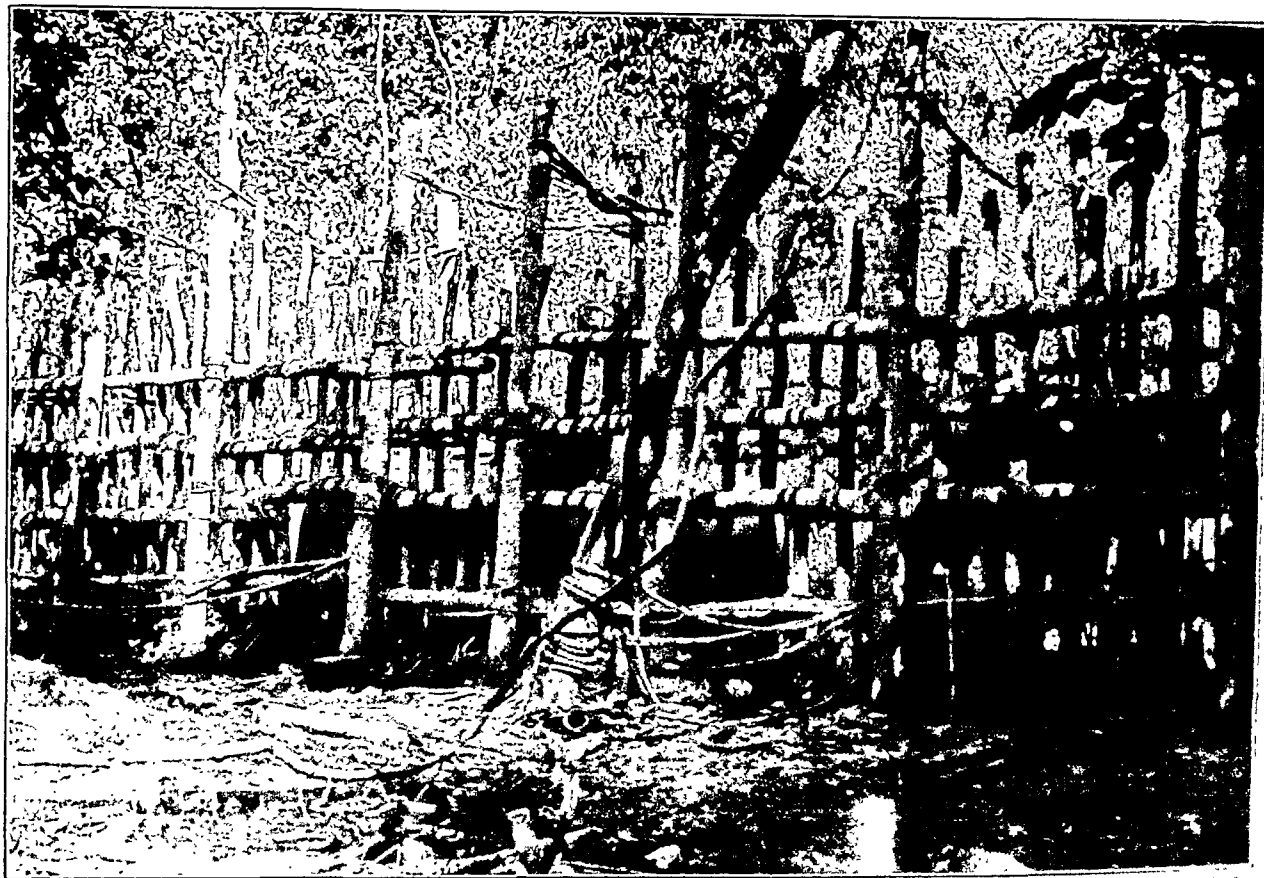
Of the 236,738 square miles, 145,000 square miles, or three-fifths of the whole area, are classed as forests, and Burma teak has had a reputation from the earliest days of European trade with India. It was principally used for shipbuilding, and when the wooden vessel was replaced, first by the iron ship and later by the steel steamer, the important fact that teak did not affect, and was not affected by, close contact with either iron or steel, caused the demand to continue, the Admiralty being still large purchasers. Teak is also extensively used for house-building, furniture, and interior work. The province possesses many other valuable woods, but very few of these can be floated; whereas teak when extracted can be floated down to Rangoon or Moulmein—some



[Photo: J. M. H. Samuels.
INITIATIVE,



[Photo: J. M. H. Samuels.
ITCHYKOO,



[Photo: Macgregor and Co.
SIDE VIEW OF ONE OF THE NARROW STOCKADES IN WHICH WILD ELEPHANTS
ARE CAPTURED



[Photo: J. M. H. Samuels.
UNITY IS STRENGTH.



[Photo: J. M. H. Samuels.
HIGH ENDEAVOUR.

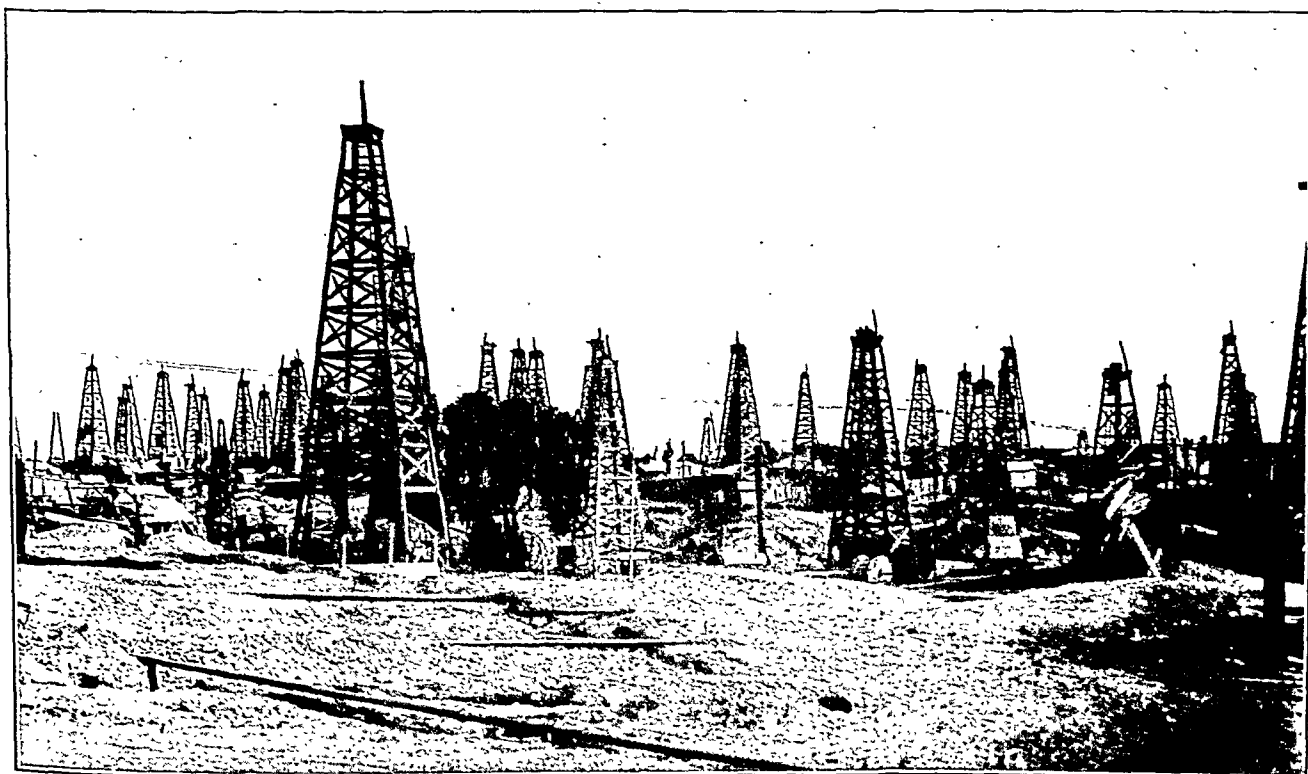
ELEPHANTS IN THE TEAK INDUSTRY OF BURMA

Burma teak is floated to Bangkok. The "jungle woods," as they are collectively called, await the development of railways and transport on modern methods before this branch of Burma's wealth can be fully developed.

Oil.

The oil-bearing tract of Burma has been worked by the Burmans since the middle of the 18th century in a primitive way; but it was not until the coming of the Burmah Oil Company, Ltd., in the eighties (followed by several other enterprises) and the subsequent wonderful development of petrol and the internal combustion engine that this element of Burma's wealth was fully exploited.

unhealthy climate, absence of transport facilities, absence of labour, and absence of local market for by-products. Gold has never amounted to more than "traces"; but silver is produced in vast quantities at the Burma mines in the Shan States, in conjunction with lead; the mines also containing valuable deposits of copper and zinc. During the war Burma became the largest producer of wolfram in the world, that mineral being found in Tenasserim in conjunction with tin. Tavoy, previously a small town on the coast, grew to be a crowded and prosperous place; but with the coming of peace the demand fell off, and Tavoy has relapsed considerably. The tin industry of the same areas has also suffered from a slump in



[Photo: D. A. Ahuja and Co.]

OIL-FIELD AT YENANGYAUNG.

Oil is raised in the Yenangyaung and Singu areas by the hundred million gallons, and other localities are being continually investigated. The crude oil is pumped from Yenangyaung through a pipe line 275 miles long to the refineries, which are situated between Rangoon and the sea, and give employment to many thousands of people of all races. The oil-fields have recently been electrified at a cost of more than a million sterling, and a considerable quantity of crude oil, hitherto used for fuel, is thereby available for the more valuable purpose of producing benzine, petrol, lubricants, and wax.

Minerals.

The mineral wealth of Burma is undoubtedly great, but difficulties have stood in the way of its being profitably worked, *e.g.*, remote situation,

prices, but is well established, and has every prospect of profitable expansion.

Population.

Population is the one thing lacking in Burma, where a little more than 13 millions of people are spread over 236,738 square miles. There was an increase of just over a million in the decade 1911-21, but the country is still greatly under-populated. This is due partly to the results of past tribal and racial wars, partly to malaria and other diseases, and partly to the very high infant mortality. Much is being done by education and direct sanitary measures to check the ravages of disease, and a large programme is contemplated by the Board of Public Health. The people accept vaccination and inoculation much more readily than in India, and the ample supply of good water

is one of the Government's chief cares. The influx of Chinese, added to the natural growth of the population under conditions of prosperity, will in time help to fill the waste spaces of the province. And in all that benefits Burma, Rangoon will be the first to benefit and prosper, with increased trade and commerce to test to the full its transport facilities, actual and projected. It has a cosmopolitan population, it has a well established reputation as a port where the speedy discharge and loading of vessels is a tradition, and behind it lies a great province which has not had a noticeable shortage of crops for a generation. There is every reason for confidence in the future of Burma and of its capital—Rangoon.

Railways and Roads.

The province has not been well served in the matter of railways. The first line, Rangoon to

Pegu and on to Toungoo (the northern boundary of British Burma) was opened in 1876, but the progress has been slow, and there are only 1,600 miles of line in operation, including two branches into the Shan States which are likely to be of importance in course of time. As the result of the rice control in 1919, a sum of 9 crores of rupees (equal to £6,000,000) accrued to Burma, and is being spent on railways, roads, embankments of areas liable to floods, improvement of waterways, agricultural credit banks and other methods of benefit to the cultivation. It is laid down that the rice profits shall only be spent on objects closely associated with agriculture, and the result should be a large increase in the volume of exportable produce. Communications by rail, road, and river are of great importance. The province now possesses over 250 miles of additional railway constructed out of rice profits, and likely to produce a steady income.

RANGOON

PAST AND PRESENT.

RANGOON handles over 90 per cent. of the combined export and import trade of the province, and in 1927 completed seventy-five years of progress under the British flag. If any participant in the events of 1852, which led to the creation of British Burma, could revisit Rangoon to-day, he would be surprised at the change, even though he would still recognise some familiar sights. Coming up the river, he would see the Syriam Pagoda on its hillock; but he would wonder at the smoke from the scores of chimneys in the oil refineries behind which it lies. The Shwedagon Pagoda, famous for centuries as a place of pilgrimage for Buddhists, in 1852 dominated with its vast bulk and golden surface (whence its name, *shwe* meaning gold) the Burmese town of Rangoon, being visible from everywhere on its broad high ground. It still holds the attention of the arriving traveller on the steamer; but once landed, he finds it is shut out of sight by buildings and trees, and only at night, when its rings of electric lights proclaim the steadfast faith of pious Buddhists, is its presence recognised as it deserves. The swampy banks of the river, with little firm ground on which to land and less on which to build, now face the visitor as a firmly held line of almost continuous jetties and wharves, behind which rise the buildings of the town. Half a mile from the river bank the graceful slender spire of the Sule Pagoda, which in 1852 had water round three of its sides, the only land approach being by a causeway from the north, is not now to be seen from the river, and the visitor will find it high and dry with surrounding asphalt roads, and tramcars making their noisy way along the north-east side.

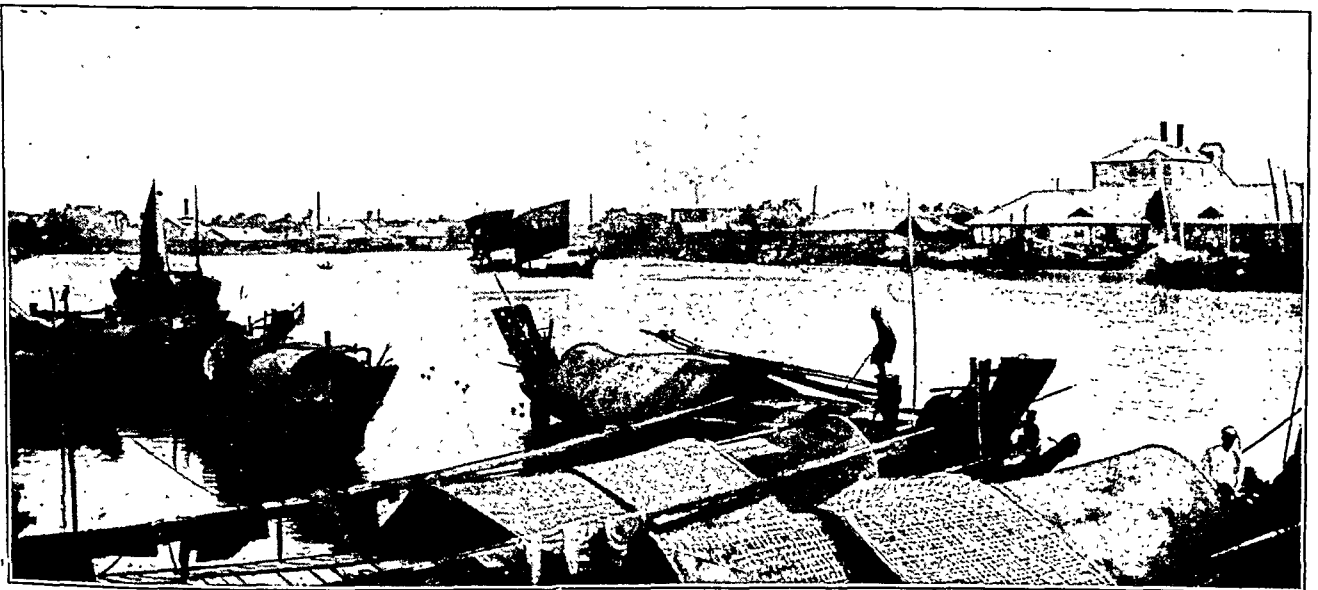
Of the town which was attacked and carried by British and Indian troops in 1852, not a trace remains other than the two pagodas mentioned; though the main roads to the Shwedagon Pagoda from the river still follow the lines of the old Burmese paths. A portion of the Shwedagon Pagoda, which was used by the Burmese troops as a fortress, has ever since the occupation been Army property as the Arsenal; and the high battlemented wall at the south-west corner with its moat and its sentry box, is one of the few evidences of military strength. The replacement of the red coat by khaki would make the soldier of 1852 wonder whether British rule any longer held good; for the red coat is imperishably associated with the growth of the Empire, and its disappearance, however justifiable on other grounds, evokes a keenly-felt sentimental regret. When the Rangoon cantonment is moved, the portion of the pagoda area occupied by the Arsenal will be restored to the Buddhists, who have long requested the removal of the military from the pagoda precincts.

After the conquest of Lower Burma in 1852, Rangoon began its new life, and those responsible for the administration took what seemed to them at the time adequate thought for the future. Situated within thirty miles of the Gulf of Martaban, on a peninsula three to four miles wide between two rivers, which brought country produce from long distances, having the rice-fields of the Irrawaddy delta within easy reach, Rangoon had come to be regarded by the Burmese kings as a suitable locality for trade, apart from the proximity of the Shwedagon Pagoda. In 1755 King Alaungpaya

sometimes called Aloungpra, established the town as the port of his kingdom of Pegu; and a factory was set up by the East Indian Company before 1790, traders from all countries finding a ready welcome. In the first Burmese War (1824-7) Rangoon was occupied, but was evacuated in 1827. A new town was established in 1846 by King Tharawadi below the slopes of the Shwedagon Pagoda, and when six years later the British arrived and conquered, that new town became the present cantonment area. Although a natural port, Rangoon had serious rivals. To the south-east, Moulmein, also at the junction of important rivers and nearer to the open sea, had been an important trading place since the Portuguese arrived there in the sixteenth century. After 1825 Moulmein was the capital of Tenasserim and the seat of

census in 1826 gave the number as 8,666; but many people had fled to the jungle when the British arrived.

The increase in trade which followed the temporary British occupation of 1825-27 and the consequent greater knowledge of Burma's possibilities, brought about an increase in population, so that in 1852 the number was estimated at 25,000 to 30,000 as in 1795. In 1872 it had risen to 98,000. The stockade had almost disappeared in 1852, but the main or King's wharf and the Custom House were prominent on the river bank, and the timber-yards of European firms were busy on the banks of one of the streams which flowed through the town from the higher ground, and through which ran the spring tides. Paddy-fields surrounded the town on the north-east and north-



PAZUNDAUNG CREEK, RANGOON.

[Photo: D. A. Ahuja and Co.]

British administration. On the west, Bassein, with its deep, broad river, close to the rice districts, had long had an East Indian Company's factory. Even close by Rangoon itself, Syriam, the site of an early Portuguese settlement and of a John Company factory, had opportunity of growth. But Royal favour and instinctive fate combined to create the present city and port of Rangoon.

Its population in 1795 was about 25,000-30,000 souls, who lived on the river bank within a high stockade less than half a mile square. Outside was jungle rising up to the pagoda. There was a Custom House and the King's wharf. Coasting vessels and small river craft were built on the shore, and the harbour was visited by much shipping; but the town, which was ruled by a Viceroy of the King of Pegu, consisted mainly of wooden or bamboo huts, raised a few feet from the swampy grounds. In 1822 the population had fallen, probably as the result of disease, to 9,000, and a

west. Fruit trees and pine-apples grew in what are now the inner parts of Rangoon. In the wooded jungle over which the Shwedagon towered were numbers of pagodas with their attached monasteries and many tanks. Such drainage as existed was elementary, but some roads, notably those leading to the pagoda, were brick-paved with a high camber to throw off the rains.

Modern Progress.

Such was Rangoon in 1852, when Pegu was added to Tenasserim and Arracan, and the name of British Burma was given to the whole. The population of the town included people of all Indian races, Armenians, Jews, and Persians, as well as a few Europeans, who had already become prominent in trade. The decision to develop Rangoon led to the immediate start of the scheme for keeping out the river from the creek, raising the general level and creating a new town. The stockade, which had extended about 1,200 yards along the river front, was cleared away. Lieu-

tenant Fraser, a R.E. officer, laid out the new town on the rectangular plan, streets 100 feet wide running due north and south, crossing similar broad streets at right angles with other narrow streets running north and south. Sule Pagoda Road is 200 feet wide. The east and west streets are parallel with the river front, which runs nearly due east and west for over four miles. The reclamation of the swamps was accelerated by the cutting round the outside of the town of a canal, now almost wholly disappeared. Brick houses replaced, though slowly, the wooden structures of Burmese times; but such was the crush of newcomers from Bengal and Madras that wooden houses were hurriedly built, and gradually removed as permanent development progressed.

Many spacious timber bungalows remain and are preferred by Europeans; but the "semi-pukka" house, with brick walls from the plinth to the ceiling, is growing in favour. Wealthy Indians and Burmans have bought houses formerly dwelt in by Europeans in cantonments and other residential districts, such as the vicinity of the Royal Lakes, and a house shortage has existed for some years, with the inevitable corollary of increased rents. Many firms provide houses for their managers and "chummeries" for the juniors. Very few of the old type of bungalow "on stilts," the residential part raised from the ground, remain, and these are mainly military bungalows occupied by non-commissioned officers. Government has been compelled to think



[Photo: J. M. H. Samuels.]

DALHOUSIE STREET, RANGOON.

Reclamation work was vigorously carried out with Government money, earth being brought from the higher grounds; but the work of reclamation is far from being completed even now that seventy-six years have passed, and it will continue in East Rangoon for years to come. Expansion to the north beyond Fraser's area was inevitable, but it took place without any control or regularity; and only in 1921 was the Rangoon Development Trust created to organise and facilitate plans of development which will make the best use of the area and provide for a rapidly growing population. The 25,000 to 30,000 of 1852 had grown to 98,000 in 1872, and to 293,000 in 1911, while a still greater increase was recorded in 1921, the census figures being given as just under 342,000. The "pukka area," representing the kernel of Fraser's plan, is very thickly populated with Indians, but suburban development has been slow and erratic; and the fact that the male portion of the population is more than double the number of the female is due partly to congestion, and partly to the large immigrant labour force which is constantly changing in personnel.

of providing residences for its officers, more particularly those who accompany the Head of the Province to Maymyo, the Burma hill station, and thus spend about six months in the hills and six months in Rangoon.

The streets of the business part of Rangoon and the roads in the residential districts contain many fine trees, some of which when in flower are very beautiful, especially the "Flame of the Forest." Crows infest the trees in the town, and all efforts to check them have failed, for though they are a nuisance and dangerous to health the Hindus and Burmans oppose their systematic destruction. The principal streets and roads are asphalted or treated with a tar-binding preparation—contrasting acutely with the many bad roads still existent. The Rangoon gharry, "a bathing-box on wheels," with its decrepit pony and worn-out harness, is another relic of the past.

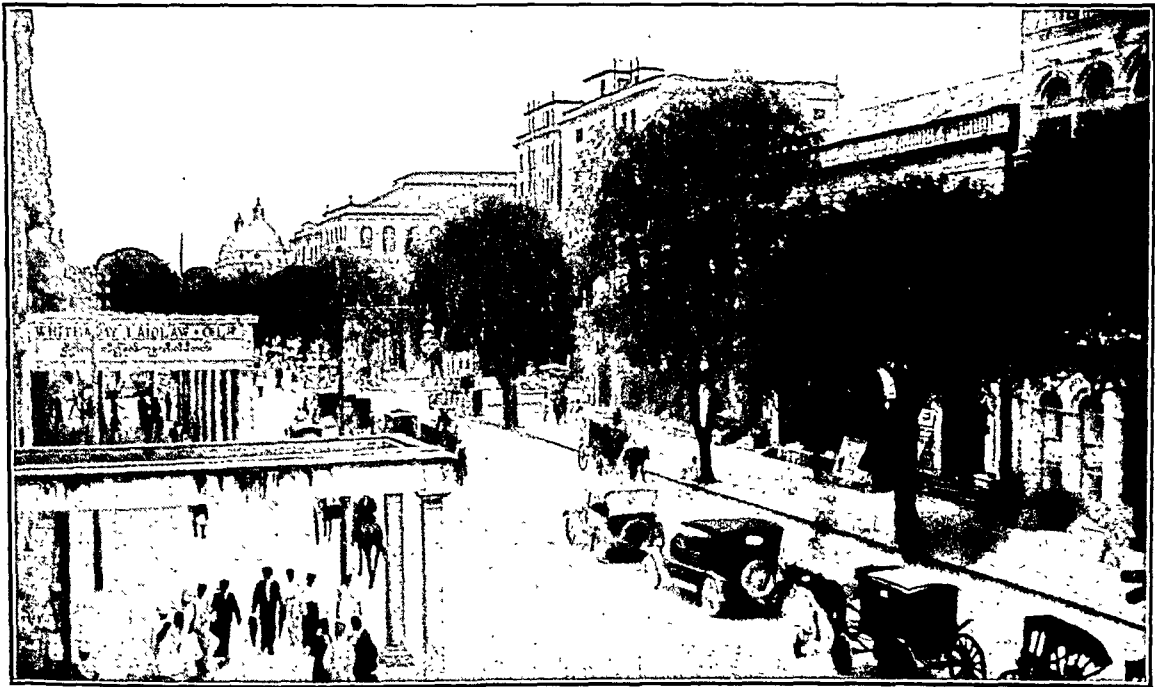
Racial Characteristics.

Although Rangoon presents the appearance of an Indian town, the Burmans having to be sought

for in the extreme eastern and western suburbs, the province maintains a distinct individuality, and its eventual separation from India is regarded as certain. The Burmans mainly belong to the Tibetan or Mongolian races. Their religion, Buddhism, although derived from India, has acquired traditions of its own in Burma, Ceylon, Siam, China, and Japan; and the national customs of the people are distinct from those of any other Indian province. This is especially notable in the position of women, who are not subject to *purdah*, and in the absence of caste, although local distinctions exist as in every other country. Women have been given the franchise on similar

write the vernacular. Higher education is of recent growth, and there is as yet no surplus of unemployed graduates as in India, where the ranks of the extremist politicians have been largely recruited from these victims of "cram." The law is the profession most affected by the ambitious young Burman. Western medicine is accepted, but has not yet attracted many Burman students; and facilities for the study of engineering have hitherto been lacking. There are no big landowners as in India.

The average Burman, in short, is either a cultivator (in person or by a tenant) or a broker. Most of the petty trade of the towns is in the hands of



[Photo: J. M. H. Samuels.]

PHAYRE STREET, RANGOON.

terms to men in the new Reforms Scheme, and their admission to the Legislative Council depends on a favourable vote of the Council. Although polygamy is not forbidden, the status of the first wife is superior to that of the lesser wives; and the situation may be broadly generalised in the statement that on marriage a woman is equal partner with her husband in the family property. This status compares favourably not only with India but with some western countries.

Every Burmese child of either sex has the opportunity of receiving elementary education in the vernacular in the village school conducted by a *pongyi* or Buddhist monk. Many of these schools are recognised by Government, who also provide a complete system of education in Anglo-Vernacular schools, High Schools, and the University of Rangoon, with a generous scheme of scholarships for each step. The literacy of Burma is thus far ahead of India, especially as regards females; but it is not a very advanced literacy, being largely limited to the ability to read and

the Indians and the Chinese. Commerce, as understood by other races, has not yet engaged the Burman, but several limited companies have recently been formed by Burmans for commercial enterprises, and their career will be closely watched. The women take a large share in the disposal of produce and in certain retail trades, and are noted for their shrewdness and bargaining capacities. The children of a Chinese father and a Burmese mother often display the best qualities of both races. Most of the Chinese come, not across the border from Yunnan, as might be expected, but by sea from the Straits, Canton, Amoy, and Fokhien. For generations there have been marriages between the Mahomedan emigrants to Burma, and the Burmese women, and the descendants, known as Zerhardis, usually have Burmese names and wear Burmese clothes, while the women are seldom subject to *purdah* restrictions.

Upper Burma having only been annexed in 1885, conditions there differ from those in Lower

Burma, and the memory of Burmese sovereignty is still fresh. The village headmen, who are midway between the people and the Government, and form an important element in administration, are often hereditary in Upper Burma, and maintain the traditions of bygone days.

The general characteristics of the Burman are his love of pleasure and gaiety, his gambling propensities, his pleasant manners, his hospitality, his fatalism (an incident of Buddhism), and his lack of the adventurous spirit (he seldom leaves his province). He likes the best and often has it,

ing in its effect. The older women who have abandoned such aids are wrinkled and thin. The well-dressed, well-coiffured, richly-jewelled Burmese woman of between twenty and thirty-five years, though small in stature by comparison with European or even Indian women, would be a notable figure in any company, and would certainly not



[Photo: D. A. Ahuja and Co.]

LOVE'S YOUNG DREAM IN BURMA.

even when he cannot afford it. The best rice grown in Burma, known as *Sabanet*, is not exported, as it is all kept for local consumption. The Burman's love of bright colours and good materials for his raiment and that of his women folk is well known; and no pleasanter picture can be seen than a crowd of gaily dressed Burmans, whether it be at a Government House garden party of a village pagoda festival. The women wear not only brilliant silks but costly jewellery. The Burman is usually clean shaven, but the women cover the face and neck with a creamy substance which has not only the merit of giving a perfectly smooth white skin, but is said to be cool-



[Photo: J. M. H. Samuels.]

BURMESE PWE.

lack self-possession. Some of the best bridge players to be met with in up-country clubs are Burmese women who have married Europeans, and acquired a knowledge of the language and of European amusements.



[Photo: D. A. Ahuja and Co.]

KARENS.

Karens and Shans.

The Karens and Shans are the two principal indigenous peoples apart from the main Burman stock. Both are hill people, and have not been assimilated, even when they live in the plains. The Karens have been much influenced by Christianity; the Shans remain Animists, but are slowly

called Buddhists. Both peoples are to be found scattered over Lower Burma, sometimes in whole villages, sometimes in house groups in a village. The Karens are proud of their individuality as a

Burmese Customs.

The Burmese month is based on the moon, and while the fourteen days of waxing are propitious, the fourteen waning days are usually avoided for



[“Rangoon Times” block.]

BURMESE WOMEN AND GIRLS.

race-group, and have succeeded in obtaining communal representation under the Reform Scheme. In the extreme north the Chins and Kachins represent other hill peoples, only recently brought under administration, from whom two regiments have been raised for the Indian Army with every

any festivity or for the beginning of an enterprise. The Buddhist Lent lasts from April to October. The full moon is the date of all festivals, which are strictly kept, and are usually the occasion of a *pwe*, a form of entertainment of which there are several varieties. The music for the *pwe* is



[Photo: J. M. H. Samuels]



[Photo: J. M. H. Samuels.]



[Photo: J. M. H. Samuels.]



[Photo: D. A. Ahuja and Co.]

TYPES OF BURMESE WOMEN.

prospect of permanency. They are somewhat akin to the Gurkhas in military qualities and comprehension of discipline.

supplied by five or six musicians, and sounds harsh and monotonous to European ears, but the dancing of the principal lady (*minthami*) in the

anyein or the chorus of twelve, sixteen, twenty-four, or even thirty-two girls in the *yein* is graceful and attractive. In the *anyein pwe* two men, as clowns, called *lubyets*, keep up a constant "back-chat" with the lady, who responds in similar vein, and the visitor often wonders what it is which causes so much amusement to the audience. When translated, the language used by the *min-thami* and the *lubyets* would not always pass the censor. *Pwes* continue through the night to the early hours, and are often marked by quarrels and crime. *Pwe* parties travel from one district to

granted only to *pongyis* of great reputation for learning and piety. The body is embalmed in honey and kept for months until a propitious date occurs, when a large crowd assembles, drawn no less by the *pwes* and other amusements than by piety. The body of the *pongyi*, in a wicker coffin, is placed on high in a slight structure of bamboo, and a rocket or firework is used to set fire to the body. This is the central incident of several days' enjoyment.

The Burmese are very clever in the use of bamboo and coloured paper for decorative pur-



["Rangoon Times" block.

BURMESE YOUTH TATTOOED

another, and the most famous is that of Mg. Po Sein, who was decorated by Government for his services during the Great War, when he not only helped with recruiting but usually made a short speech during the *pwe*, informing the audience of the British share in the war and of the duty of all patriotic citizens to support the King Emperor in every way possible. A very interesting variety of the *pwe* is the marionette show, figures being manipulated by an unseen operator, while the story is sung or chanted to music.

All kinds of *pwes* are usually seen at the remarkable ceremonies attendant on the cremation of a *pongyi*, called a *pongyibyan*. This honour is

posed, as well as in the manufacture of fireworks; while the police consider that there is much wrongly-displayed ingenuity in the making of shot-guns for the purpose of dacoity. With a locally-made gun a group of "bad-hats" are encouraged to hold up a village in the hope of getting gold, ornaments, and money; for the villagers have not yet come to the use of banks, and much money is kept in the house or buried in the ground. Villagers who resist attack and beat off dacoits are rewarded by Government for their courage and common sense; and a stout show of resistance often frightens off dacoits. Unfortunately, there is too little of this spirit shown, and dacoity is still

a profitable, though increasingly risky, occupation for the young bravo. The two seasons in Burma, the planting and reaping, only occupy about half the year, and the rest of the time is spent by those who can afford to do it in enjoyment. Gambling is a pleasant way of passing the time, and the heavy loser may seek to recoup himself by a well-planned dacoity. The absence of interest in village life is often mentioned as a cause of the excessive crime which has given Burma such a bad name.

In middle age the Burman usually "gets religion," and if he can afford to do so he will build a pagoda, a monastery for the *pongyis* or a rest-house near a pagoda, all such being works by which he will "acquire merit" and hasten his progress to Neikban, or Nirvana, as it is usually known. There is little if any merit in repairing a pagoda, hence the number of ruined pagodas to be seen throughout Burma. Contributions to hospitals make little appeal to the Buddhist, as they are not considered to be very efficacious in the acquisition of merit. This is a personal matter, and the lack of a spirit of public service in Burma is partly due to the Buddhist attitude towards salvation, in which what we call "altruism" has little share.

Although not an opium smoker, the Burman eats opium as a prophylactic against malaria and fevers in unhealthy districts, and in consequence it is often thought that he is a victim of the drug habit. This is not the case; the number of Burman smokers is small and is being steadily diminished. Most of the recognised opium smokers in Burma are Chinese. Morphine and cocaine, which are much worse than opium, are contraband, but the frequent seizures of large quantities suggest that there is a demand for these drugs as well as for *ganja*, an Indian hemp drug.

The dress of the Burman consists of a high-necked short jacket (usually white), double-breasted, worn over a collarless shirt, vest and short pants, with a long piece of coloured cloth, which is drawn round the waist like a skirt, extends to the feet, and is twisted over in front so as to secure its position. The jacket is called *aingyi*, the cloth skirt *loongyi*. On festival days the older Burmans tuck in to the *loongyi* an additional piece of the same material pleated, called a *paso*. A piece of coloured silk or cotton, usually in contrast with the colour of the *loongyi*, and called a *gaungbaung*, is twisted round the head, and tucked in with a long loose end. The younger generation affect short hair, but many Burmans wear the hair long, and cover it with the *gaungbaung*. When the Burmans enlisted during the war, they wished to keep the *gaungbaung*, but this was considered unsuitable for active service; and as they disliked the Indian turban, or *pugri*, a compromise was made, and they were given the cowboy, or boy-scout, khaki hat, which did not quite suit the average Burman youth's features.

The Burmese woman's dress is much the same as the man's, save that they often wear a long

coloured silk scarf round the neck; the long hair is not covered, but is drawn round the head so as to stand well off the forehead, a comb of wood or ivory being used as a framework. The hair is somewhat coarse, but is oiled, and presents a brilliant appearance by contrast with the smooth white face. Flowers are often worn in the hair, sometimes petals are stuck in, and a sprig hangs down by the ear. The ears are bored at puberty (a ceremony corresponding to confirmation, just as does the boy's becoming a *pongyi*, if only for a day) and the ornament inserted may either be valuable diamond *nagats* or a short glass cylinder, striped or coloured. Both the men and women always look bright and clean, a contrast to the average Indian of the same social status. European clothes do not look well on Burmans of either sex, their own being much more attractive. Some



[Photo: D. A. Ahuja and Co.]
BURMESE FLOWER-SELLERS, RANGOON.

of the men wear short side whiskers, which give a curiously old-fashioned effect to the face.

A primitive people, the Burmans retain many superstitions, of which the most evident is worship of *nats* or disembodied spirits, capable of working evil if not appeased. On many roads in Rangoon may be seen trees with a small space cut or hollowed out of the trunk, in which are placed candles and flowers to please the *nat* of the tree. These offerings are regularly maintained. There are many superstitions about immunity from death conferred by magical means; and nearly every Burman has his legs and buttocks tattooed as a means of preserving virility. Tattooing is a regular profession, as is the casting of horoscopes and the finding out of "auspicious days."

Burmese Titles.

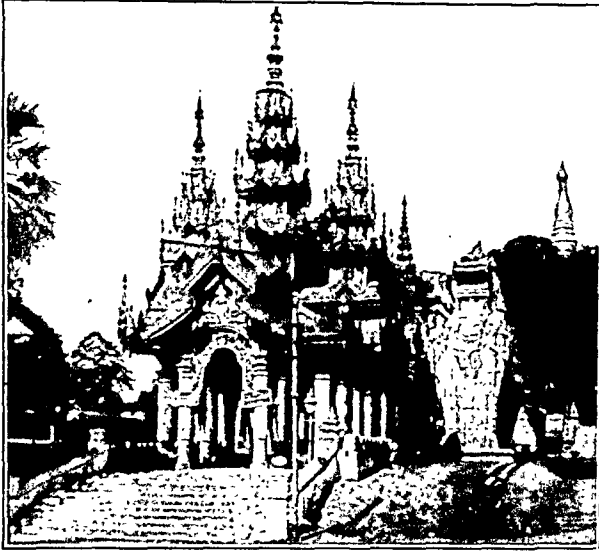
Burmans have various honorific methods of address: every Burman name has the prefix Maung, which is equivalent to Mister. Ko, meaning uncle, indicates not merely age but seniority among people of equal standing: thus a college

student who is president of the debating society or captain of the football team is often styled *Ko*. *U* indicates not so much age as precedence: the first Burman judge of the Chief Court was Mr. Justice Maung Kin, that being his name and official designation, but he is always alluded to by Burmans as *U Kin*. The appointment of this gentleman as permanent judge dates from 1917, an indication of the province's stage of development. In 1923 he became an Executive Councillor under the Reform

accord better with their dainty ways; for the average Burmese woman usually looks "a perfect little lady" and behaves as such.

Native Artistry.

Even the flower-seller at the pagoda steps, with her display of roses or fruits on a red lacquer tray, pleases the eye and suggests the artistic quality which is so marked a feature of the province. In its brilliant sun, colours mingle which would be discordant if seen so placed in Europe. The carved and gilded woodwork on the pagodas, the gracefully shaped carts, the country boats gliding along the river with high-pointed and carved or painted stems, the children's toys, the lacquer boxes and trays which are all meant for use, the brass and copper gongs, the silver work in high relief, the



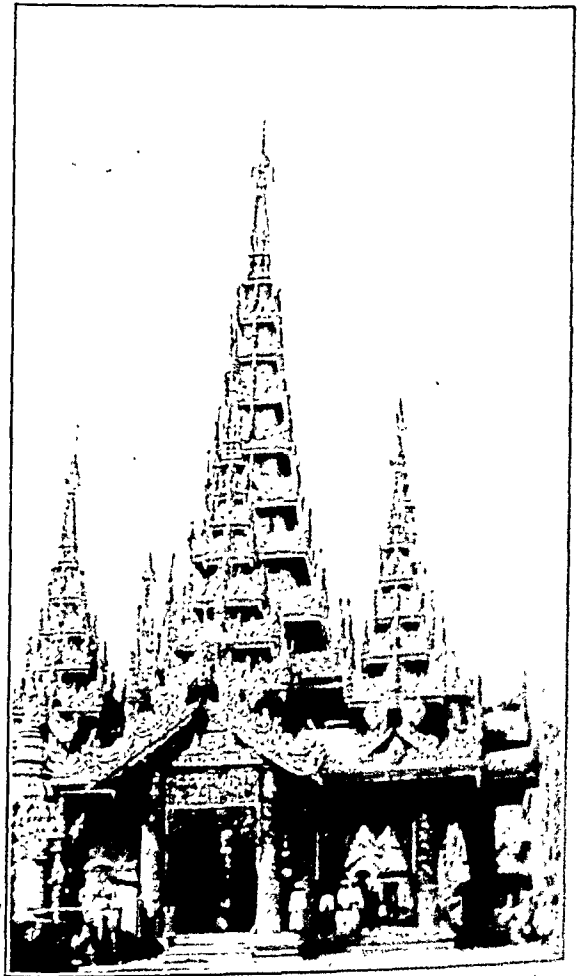
[Photo: D. A. Ahuja and Co.]

ENTRANCE TO THE SHWEDAGON PAGODA, RANGOON.

Scheme. Women's names are more specific: an unmarried girl is *Me*, a married woman *Ma* or *Mah*, and an elderly lady, or one to whom special respect is due, is *Daw*, literally Aunt. Among Burmans who do not rely on clocks, the expression "the time when the elders grow quiet" is a well-defined period at night, just as "the time of a pot-boil" or "the time of a betel-chew" are synonyms for well-defined durations of time.

Tobacco.

The "whacking white cheroot" of Kipling is more innocuous than it sounds: it is made of bits of tobacco and leaves wrapped in the covering from maize and supplied with a mouth-piece of cane. It is no stronger than a cheap cigarette, but lasts longer, and falling ash has to be carefully kept from burning a hole in one's clothes. The ordinary Burma cheroot is of tightly-rolled tobacco, usually imported from Coconada, with a wrapper of Burma-grown leaf. Burma tobacco grows easily in the silt of the rivers, and is strong because of the methods of drying and curing. For years past the French Government tobacco *regie* has bought large quantities of Burma tobacco and shipped it to Algiers, where it becomes part of the stock from which the famous "Petit Caporal" cigarettes are made. Burmese women are taking to smoking home-made and imported cigarettes instead of the "whacking white cheroot," and these certainly



[Photo: D. A. Ahuja and Co.]

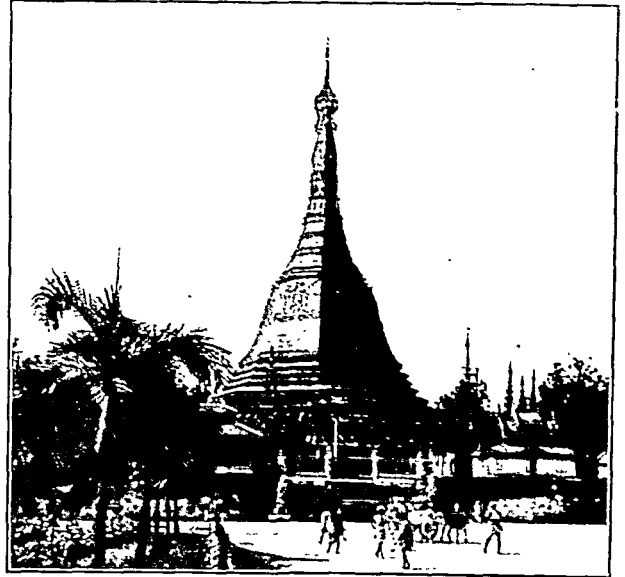
ONE OF THE TEMPLES OF THE SHWEDAGON PAGODA.

ently about it when he is making a replica, and will vary the design or the colouring just as his fancy dictates. Red and gold are the dominant colours of the lacquer work, with often a strong black background. The finest lacquer is that made on hair; the ordinary lacquer is made on bamboo, and will not bend to any great extent. Burmese silver bowls are famous for their shape and the raised designs. A kind of thick gum (*thitsi*), which hardens on exposure, is used for low relief modelling with much effect. The Shans and Kachins make in striking colours beaded and fringed bags, which are in general use, being slung over the shoulder by long straps of the same material. The giant oyster shells from Mergui, when polished, make a unique dessert service, being practically identical with "mother of pearl," for pearls are found in the local waters.

The Priesthood.

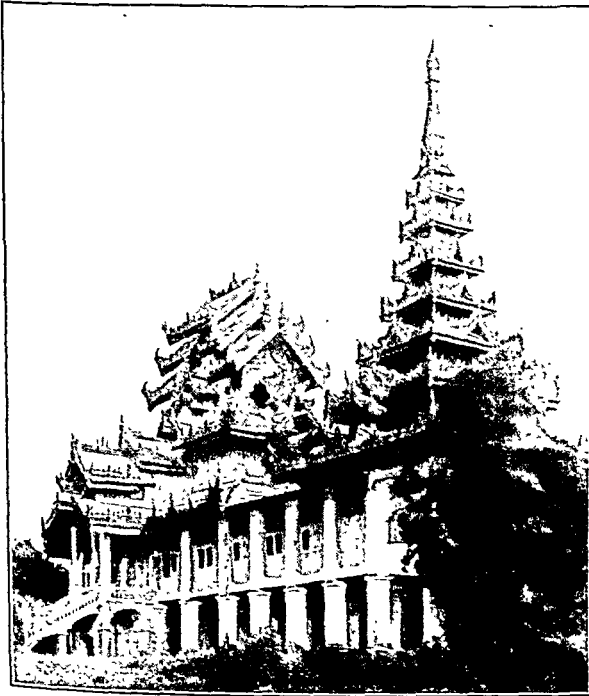
The *pongyis* occupy a peculiar position, not being priests in the Christian sense of the word, nor being essential to the layman save as shining

sect, and has control over the *pongyis* in Upper Burma. When next the post of *Thathanabaing* becomes vacant, the Government has promised to consider the question of extending his jurisdiction to the *pongyis* of Lower Burma, some of whom have since the beginning of political activity taken a very strong interest in politics, although the "Vinaya" (or Buddhist Canon) forbids any participation in worldly affairs, and especially forbids the preaching of any hatred or dislike such as the



[Photo: D. A. Ahuja and Co.]
SULE PAGODA, RANGOON.

politically-minded *pongyis* have freely indulged in towards Government and its officers. The *pongyi* is obliged by the laws of the "Vinaya" to abstain from all food after noon, to avoid the company of women, to remain remote from *pues* and public gatherings, to abstain from drink and flesh food, and not to touch money. These restrictions are often more honoured in the breach than in the observance, yet it is no uncommon sight to see a *pongyi* in a Rangoon European shop accompanied by a youthful follower (*koyin*) who carries his money and receives the change for his purchases. At other times they may be seen handing money in a piece of paper to the shop assistant, and insisting on having the change handed back similarly wrapped up, so that the prohibition against touching money may be, at least technically, obeyed. The *pongyi* is also supposed not to be photographed, although photography was not invented when the Lord Gautama Buddha gave his precepts of life; and the visitor to a photographic studio sees there portraits of *pongyis*. The clean-shaven heads emphasise the typical irregularity of the Burmese features. There is a great tolerance about the *pongyis*, who readily admit in their *kyaungs* (monasteries) a stranger who knows how to gain their confidence as a wearer of the yellow robe, so that criminals and persons "wanted by the police" have often escaped detection by taking refuge in a *kyaung*.



[Photo: D. A. Ahuja and Co.]

HPONGYEE HYAUNG.
(CHIEF PRIEST'S HOUSE), RANGOON.

examples of the ascetic life, devoted to study and teaching. Every Burman Buddhist boy has to become a *pongyi* if only for a day, and the occasion is usually a good excuse for *pues*, feasting, and display. There are several sects of Buddhists, or rather of *pongyis*, some being absolutely devoted to study and self-denial, while others are conspicuously less enthusiastic; but the ordinary villager knows little of these distinctions; and all worship alike at the pagodas. The local Government recognises and supports the authority of the *Thathanabaing*, who is the head of the Thudama

Native Dishes.

The yellow robe, the characteristic garb of the monkhood, is dyed with the juice of the jack fruit, a large fruit which grows freely throughout Burma. Another well-known fruit is the *durian*, the custard-like interior of which is eaten with great relish by Burmans and a few Europeans: the penetrating noisome smell makes it difficult for ordinary people to swallow it without being violently sick. The smell of a *durian* opened inside a room will be noticed for days afterwards. The Burmans proclaim it most wholesome and beneficial. The Burmese are very fond of fish, and *ngapi* (pronounced as though minus the "g") is considered by them a great adjunct to their vegetable curries. As *ngapi* is heavily salted fish

the mound on which the pagoda stands represents soil brought up from the vicinity, thus forming the lakes, which are really one continuous sheet of water surrounded by trees and sloping lawns with an irregular coast line of seven miles. There is always a breeze on the lakes, and the view of the pagoda from the eastern end of the water on a bright moonlight night evokes as deep emotions as does the Taj Mahal. The Victoria Lakes are some six miles from the river's edge, and are surrounded by fine trees and have several wooded islands. They are of deliberate construction, the water being at one time supplied to the town but now used only for street watering and drain flushing since the creation of a large water reservoir at Hlawga, some fifteen miles farther north. On



[Photo: D. A. Ahuja and Co.]

ROYAL LAKES, RANGOON

which has been kept for months, sometimes underground, it is scarcely remarkable that Europeans find its very presence objectionable, and few can eat it. A somewhat milder and less old preparation of fish called *balachoung* is, however, quite acceptable in small quantities with curry.

The Lakes.

All these things can be had in Rangoon which, though in many respects no more typical of the province than London is of England, yet exercises great influence. The city has grown far beyond the plan of 1852, and now stretches out many miles northward from the river. That is the only direction in which it can expand, and its growth is affected by several causes: the Royal Lakes, the Shwedagon Pagoda, and the Victoria Lakes. The Royal Lakes, now well within the city, are exceedingly beautiful and a joy for ever. They lie to the east of the pagoda, and one tradition has it that

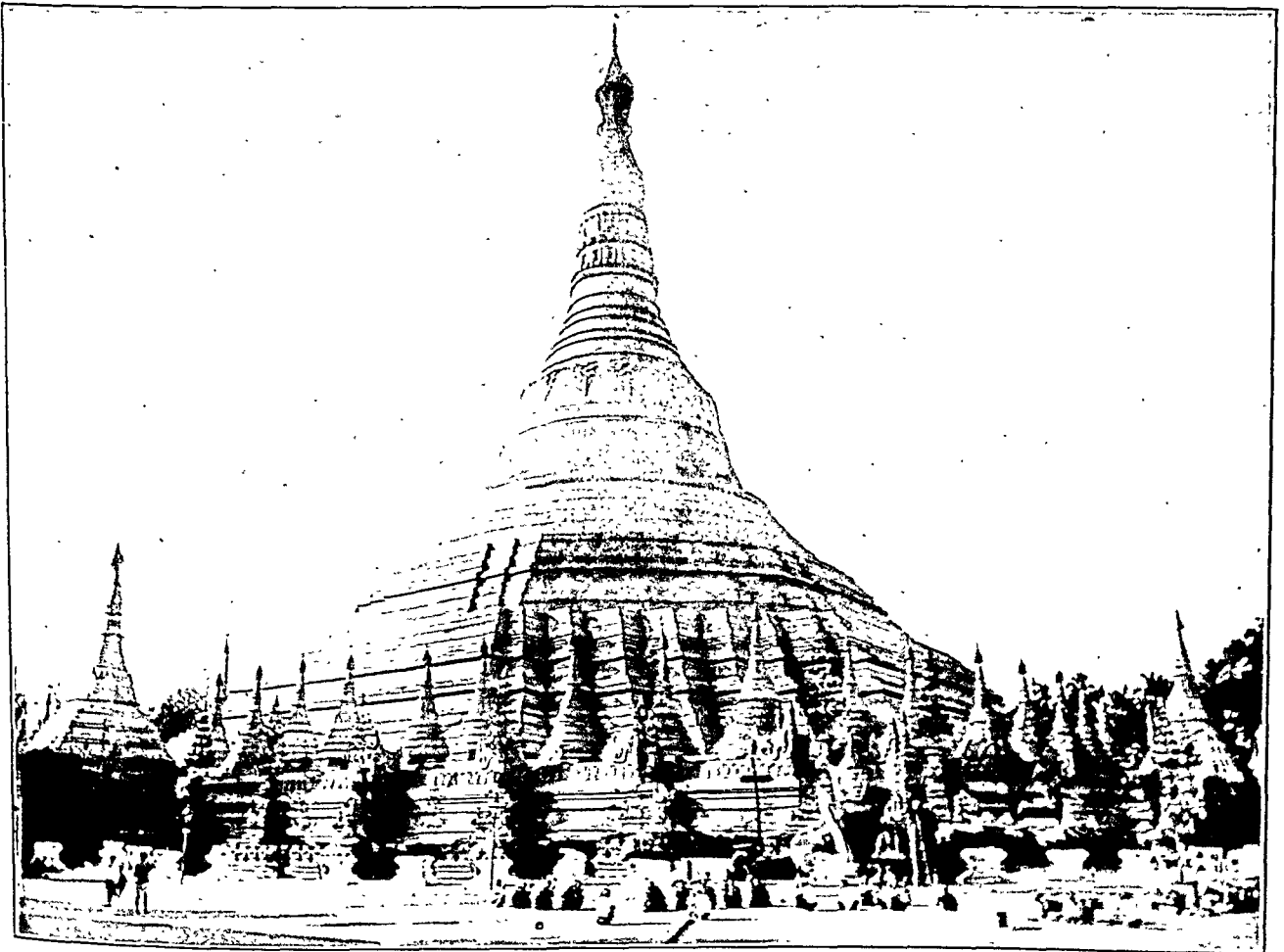
either side of the Victoria Lakes are the two roads out of Rangoon, which meet beyond the lakes and form the main road to Prome and Pegu. At the thirteenth mile "a red road," so called because of the laterite used in its construction, turns off to the left to the Mingladon golf links, one of the finest courses, and certainly the most picturesque situated, in the East. There is a town course on the native infantry parade ground, between the Shwedagon Pagoda and Government House, which is also available for the Golf Club, and attracts those unable to spare the time for the forty minutes' motor drive to Mingladon.

Clubs and Sports.



PROMENADE, SHWEDAGON PAGODA.

[Photo: Wagstaff and Co.]



THE GOLDEN SHWEDAGON PAGODA, RANGOON

(The greatest pagoda in the world.)

[Photo: Wagstaff and Co.]

football matches attract enormous crowds, tennis tournaments are played, and an athletic meeting takes place at the New Year, a racquet court (but little used) and tennis courts at all the clubs, of which there are a full dozen representing all classes



[Photo: D. A. Ahuja and Co.]

IMAGES AT THE SHWEDAGON PAGODA.

week, and after dinner on Saturday nights. The Turf Club opened in 1925 its new course in a north-eastern suburb, where an ordinary track a mile in length and a steeplechase track of $2\frac{1}{2}$ miles, with training tracks, etc., have been laid out on high ground of about 135 acres. The Club benefited exceedingly by the institution of the totalisator, but still retains bookmakers for big punters. Australian horses are imported, though most of the racing is with Burma breds, 13-2, 13-0, 12-2, and under. The Turf Club controls racing throughout Burma and has done much to improve it. The Burmans are enthusiastic supporters of racing, and many valuable cups and other prizes have been won by small owners, some being women. Football has caught on wonderfully at school and college with the Burman lads, who give a good account of themselves against teams of heavier weight. A traditional Burmese boys' game is "Chin-lon," the name of a light open wicker-work



[Photo: D. A. Ahuja and Co.]

PRECINCTS OF THE SHWEDAGON PAGODA.

and interests. There are seven cinema houses in Rangoon, and theatrical companies appear at the Excelsior and Globe cinemas, as well as at the Jubilee Hall. The Gymkhana Club has two dancing rooms, which are crowded on three evenings a

ing it from one to another. H.R.H. the Prince of Wales was much interested in a display of "Chin-lon" he witnessed at University College during his stay, and a dozen "Chin-lon" balls were purchased for the use of the Prince and his staff on the homeward voyage of the *Renown*.

Buildings.

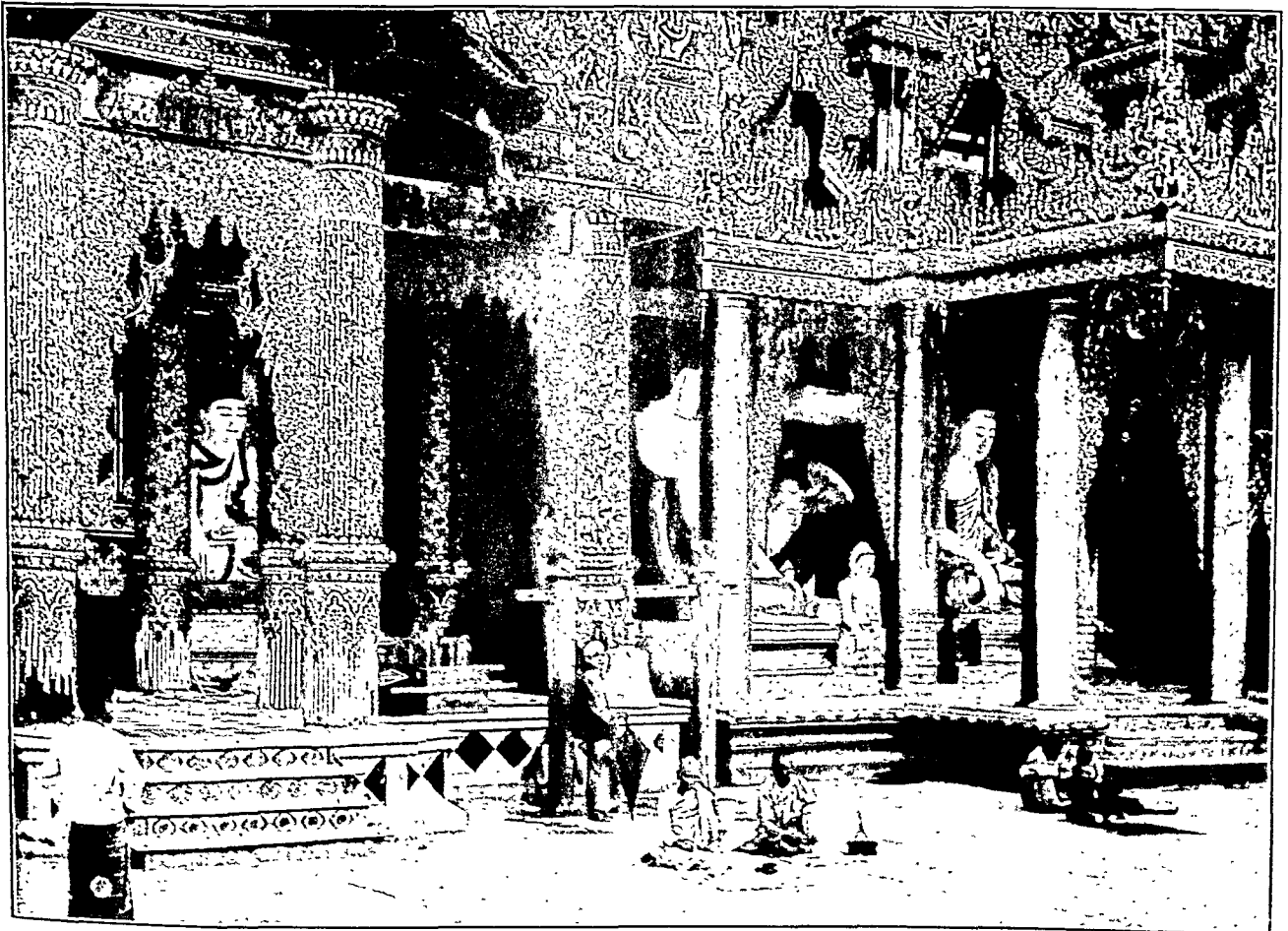
Government House, where H.R.H. the Prince of Wales stayed during his visit in January, 1922, is a fine brick structure, standing in extensive grounds and proclaimed by those in a position to speak with authority as the second best of its kind in the Indian Empire, the best being Viceregal Lodge at Simla. Many other handsome buildings have been erected, notably the Chief Court (now designated the High Court in view of a change in status), which looks on to the Sule Pagoda. The Secretariat is built on what was a boggy swamp, and is always reputed to be in danger of collapse, but has so far survived. Close by is the Roman

(equal to over £250,000) is splendidly equipped, and challenges comparison with any other in Asia; its broad front, including residences, is over 400 yards long. Facing it is the building of the Uni-



[Photo: Wagstaff and Co.]

RECLINING IMAGE OF BUDDHA,
SHWEDAGON PAGODA.



[Photo: D. A. Ahuja and Co.]

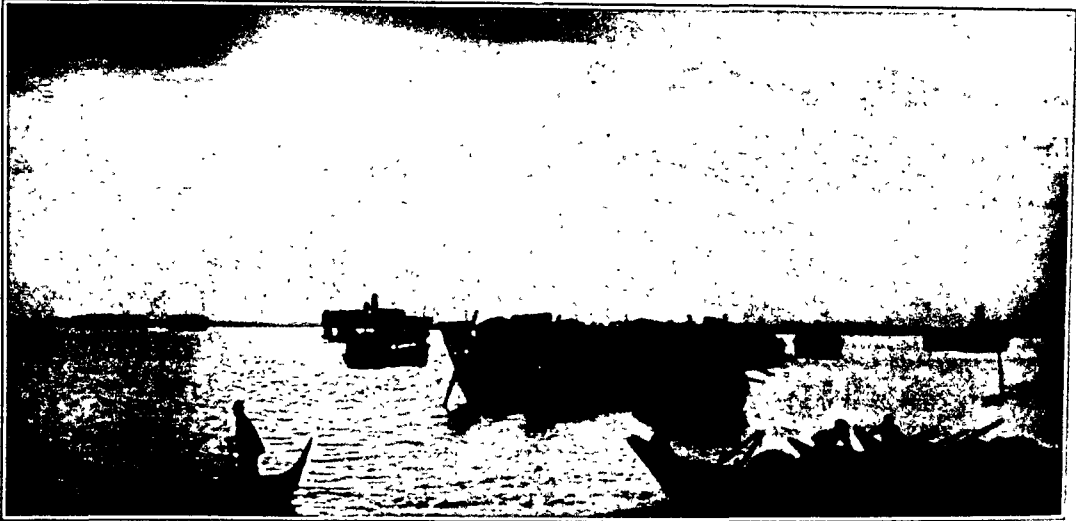
PRECINCTS OF THE SHWEDAGON PAGODA.

Catholic Cathedral of St. Mary, also threatened because of its site, but still upstanding: its devoted architect, who died before its completion, was one of the priests of the French Mission who have long ministered to their flocks in Burma. The General Hospital, which costs about Rs. 40 lakhs

versity of Rangoon, soon to be replaced by a fine structure on the south side of the Victoria Lakes. Holy Trinity Cathedral (Church of England) is close to the General Hospital, and suffers from having been "designed" by the Public Works Department. The Central Telegraph Office, the

Customs House, and the Government Press are all notable buildings; but Sule Pagoda Road, the finest in the city, has no architectural features in keeping with its 200 feet width, save a fire station with an observation tower. The Municipal buildings are mean and unworthy of a city of 342,000 people. The Jubilee Hall, raised to commemorate Queen Victoria's Jubilee, looks like the creation of an architect's nightmare in which the Gothic style fought with a railway station for dominance.

methods; but his readiness to lend money on growing crops has led many Burmans to extravagance and to the loss of their lands. Each Chetty firm has its headquarters in India, and is represented in Burma by an agent, who is changed every three years, when all accounts are closed, the new agent opening new accounts. Many of these Chetty firms acquire wealth and influence, and their temples contain jewelled idols of great value. They spend very little on themselves, except perhaps one valuable ring; their clean-shaven

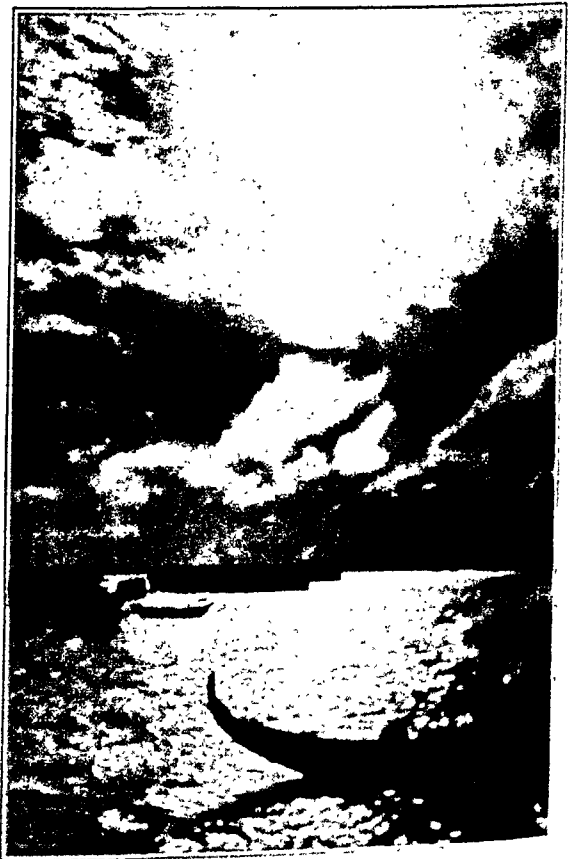


Churches.

In addition to the two Cathedrals mentioned, there are several Church of England and Roman Catholic Churches, a Presbyterian Church (which has great support from the commercial community, Rangoon being "a suburb of Glasgow" commercially), and churches for other Christian denominations, of which the American Baptist Mission is the largest. Dr. Adoniram Judson came from the States to Burma in 1816, thus preceding the British invasion by eight years, and laboured in the province for many years; he wrote a Burmese grammar and compiled a dictionary still much in use. The Baptist Mission has at work throughout Burma a number of missionaries who have been particularly successful among the Karens: for of the 257,000 Christians in Burma at the 1921 census, some 160,000 were Baptists, and of these 135,000 were Karens. There were 73,000 Roman Catholics, 19,600 Church of England, 1,500 Presbyterians (including one Chinese), and 1,400 Methodists. Rangoon has churches for all these races and denominations, also for Seventh Day Adventists. There are joss-houses for the Chinese, mosques for Mahomedans from various parts of India, and Hindu temples for the various castes, including more than one Chetty temple.

Chetties.

The Chetty is a Southern Indian money-lender, whose financial abilities have been amply proved. He borrows money from banks and lends it at profit to cultivators and traders. He has a high reputation for honest if exacting business



SUNSET ON THE RIVER, RANGOON.

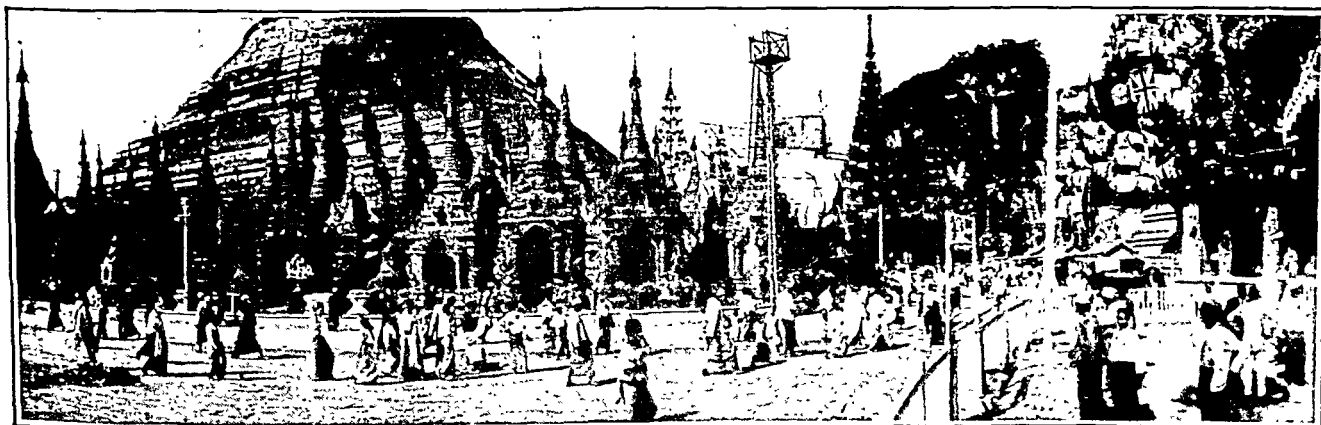
heads (notable for the strong features and penetrating eyes) and their long white cotton cloth wrapped round the body, marking them out to even a casual observer in the streets of Rangoon.

Municipal.

Rangoon's domestic affairs are controlled by a corporation of 34 members with a Government officer as Commissioner or Chief Executive Officer. Burmans number 10; the European and other communities (which term includes Anglo-Indian Jews, Parsees, and Armenians) 5, Hindus 4, Mahomedans 5, Chinese 2, commercial traders 2, representative of the Port Commissioners 1, and members nominated by Government 6. The tramways and the electric lighting of the town are in the hands of one concern, the old steam-tramways having been replaced in 1906 by the present extensive electric tramway system. Further extensions are contemplated in conjunction with the Development Trust. Oil lamps are still found

night soil from the various houses to depots at the eastern and western ends of the city. An enlarged water supply is needed before modern sanitation can be more widely introduced.

One of the complaints of the visitor to Rangoon is that very little can be seen of the river, owing to the warehouses and buildings on its banks. Only a few hundred yards, facing the Strand Hotel, remain open, and this is used as a landing place for steamers. (Incidentally it may be said that the Rangoon River is not truly one of the mouths of the Irrawaddy, its waters coming largely from the Pegu Yomas. It is a wide stream with a strong current, but not much of its water comes from the Irrawaddy.) Along the bank also runs a line of railway owned by the Burma Railways, and affording connection with the mills at either end of the city to the riverside wharves. By agreement with the Municipality, this line cannot be worked in the day time, as access to and from the wharves, godowns, and mills would be hindered; and this re-



PROMENADE, SHWEDAGON PAGODA.

[Photo: Wagstaff and Co.]

in some important thoroughfares, as the Corporation is always in need of money, and can only extend electric lighting as its revenues grow. The Rangoon Police are separated from the Provincial Police, the Commissioner being directly responsible to Government. The strength is 1,542, of whom 117 are officers, including 34 European sergeants who control traffic and supervise the others.

Rangoon had no Municipal existence until 1874, when the Municipal Committee was set up. Government, as the owner of the entire area, sold much of the town outright, and spent the money on improvements, reclamation, etc., for practically all the area between the river bank and the railway line is "made ground," requiring costly expenditure. This policy was discontinued later, and leasing took its place, but the Government estate is now reduced to 3,000 acres, much of which still requires reclamation. With very little difference in level, drainage is expensive, needing compressor stations, and only one half of the city is supplied with pipe water and drained, the newer part being still condemned to a noxious and primitive system of conservancy by carts, which remove

striction has materially affected harbour development. Night working is necessarily slow, and rolling stock is held up to an undue extent before it is released for other use.

Food Supplies.

The city's food supplies come from one central bazaar, which is run by a small and very wealthy group of Mahomedans from Surat and has several allied bazaars in the suburbs. The Surati Bazaar is not so attractive for European visitors as the famous Calcutta Bazaar, being badly kept; but improvements are contemplated, and the Municipality has a project for a bazaar which may prove a serious rival. Meanwhile the Surati Bazaar Company takes toll from every householder in Rangoon. There the cook goes to buy the meat and vegetables for the day's meals, and he charges as much as he thinks the *memsahib* will stand. The meat is sold by Chulias from Southern India; the vegetables and fruit are mainly in the hands of Burmese women or Chinese; the cloth is in the hands of Indians, both Mahomedans and Hindus. Mutton is imported alive from Calcutta by every

boat, as sheep do not thrive in Lower Burma; but much goat flesh (euphemistically called "maidan mutton") passes for the genuine article. Beef is of poor quality, being usually from obsolete Municipal draft bullocks. The Burmans share to some degree the Hindu objection to cow-killing, but eat pork, as do the Chinese. The inevitable chicken is offered in great quantity and variety of age and tenderness. Ducks, cultivated by a few Chinese in artificial incubators, find a ready sale at good prices. Vegetables and fruits vary with the season, the Shan States producing throughout the year excellent potatoes, and (in the cold season) cauliflowers, as well as strawberries, limes of both kinds and oranges. The banana and papaya are everywhere, and mangoes are plentiful in season, the *nette* variety from Upper Burma being considered the best. Custard-apples are shunned by Europeans because they open when ripening, and

the basket, averaging 46 pounds in weight, with increases or deductions if above or below that weight. Rice is sold by the basket of 75 pounds. The normal ratio between paddy and rice is that 100 baskets of rice (weight 7,500 pounds) cost two and a half times the price of 100 baskets of paddy (weight 4,600 pounds), with slight variations for special qualities. The weight of a bag of rice varies according to its destination, between 163 and 225 pounds. Burmans eat the best rice they can afford to buy.

Domestic Conditions.

Dearness of living in Rangoon and throughout Burma is such that a special "Burma allowance" is given to all members of the Imperial Services. This is due largely to dependence on imported goods and to the imported labour. The Lower Burman is too much of a "toff" to undertake



[Photo: Wagstaff and Co.]

RANGOON WHARVES.

the ever-present fly likes to inspect the white which shows at the openings. Mangosteens, a small round brown fruit of very delicate flavour, are remarkable because on the outside skin are four, five, or six little brown petals, arranged starwise, corresponding with the number of juicy white sections to be found inside. The Chinese market gardens near Rangoon produce a variety of good vegetables. Pine-apples grow in profusion but without care, and, therefore, are small and of moderate quality, though very cheap. With a little science, very fine pine-apples could be produced in Burma. Rangoon's fish supply comes from the Rangoon River, and could be greatly improved. Prawns are much in favour with the Burmese. A deep-sea trawling company brought its supplies to market at the wrong time of day and soon became extinct.

Burma retains its old standard weight, the viss, which is equal to 3.50 pounds. Paddy is sold by

domestic service or coolie labour. His place is taken by Madrassis, who do all the domestic work, and by Chittagonians and Bengalis, who, with Telegus from Madras, do the industrial and agricultural work to which the Burman objects. In Upper Burma the Burman has less objection to doing what has to be done; and as for *jump* work all Government officers and employees, of private firms have to employ Burmese servants, these being nearly always Upper Burman. The Indian has the advantage, as a rule, of talking a little English, which few Burmese servants can do; and "Burma head" is an allusion that accuses the *mem sahib* from learning what he can and is a difficult language. "Burma head" is a tendency to forgetfulness, an inclination to let things happen, and an inability to concentrate, which attacks all new-comers with varying degrees of intensity and permanence.

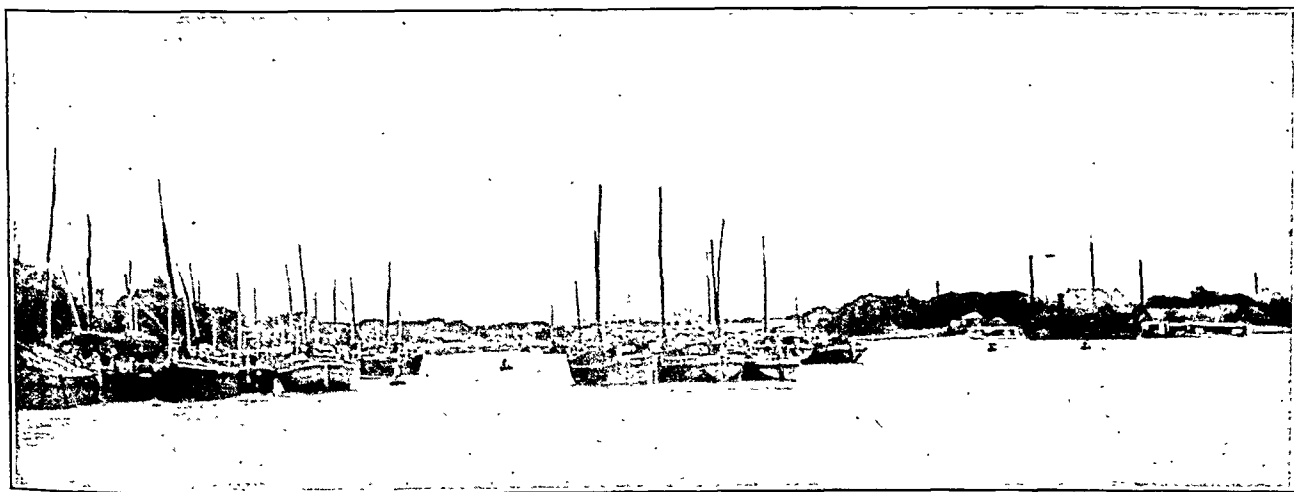
Indians v. Burmans.

The Indian is despoiling Burma, as the figures of postal orders issued and cashed in Burma show. The balance against Burma is about Rs.3 crores a year (£2,000,000), which represents the savings of thousands of domestic servants, industrial employees, agricultural labourers, policemen, and others who are just as much "birds of passage" in Burma as are the Government officials and business men from the United Kingdom. The conditions under which Indian labour lives in Rangoon are highly insanitary and anti-social, but they enable the labourers to save money, which they send before them to their homes in India in anticipation of "retirement," just as the I.C.S. men or the *burra sahibs* do. The Indian looks upon the Burman as a *junglewala*, and the Burman responds by calling the Indian *kala* (foreigner) and resenting his presence in a province which, it must be admitted, has largely pros-

and the Burmese regiments are better when serving out of their own country.

Immigration.

The figures of arrivals and departures each year make Rangoon the second largest immigrant port in the world, being exceeded only by those of New York. Most of the travellers are agricultural labourers from India, who go to Burma for a period of one or two years, a number becoming permanent residents of the province. Complaints of poor treatment and of delays on arrival owing to medical and other inspections were a subject of agitation for many years. Much of the trouble was admittedly due to the inadequate landing arrangements provided at the port, and there is no doubt that the conditions for third-class passengers were distinctly unfavourable up to the opening in 1921 of a new Port Health Station, which can handle steamers with 3,000 deck passengers each in three or four hours, every



[Photo: D. A. Ahuja and Co.]

RIVER SCENE, RANGOON.

pered through a free supply of Indian labour. The Burman even employs Indian caretakers at the great Shwedagon Pagoda, rather than people of his own race; and a Burman policeman on Rs.17 a month has been known to employ the services of an Indian water-carrier rather than fetch his own water. This short-sighted assumption of superiority is part of the cause of the Burman's inability to prevent the province and its capital being over-run by Indians and Chinese; even his cousin and co-religionist, the Siamese, has the name of being more industrious. A whole-time monotonous occupation is abhorrent to the Burman, who likes variety and frequent holidays, when he can take his pleasure with the best of them. Motor driving, just because it is full of excitement with an element of risk, attracts the young Burman, who ought to be using his abilities in business or a profession. A company of Burmans who served in Mesopotamia with the Motor Transport Units did quite well; but barrack life reacted on them, as on all Burmans, unfavourably,

passenger being examined for plague or other disease.

Climate.

Although enjoying a much shorter cold season than Calcutta, Rangoon has a more equable climate. About 100 inches of rain fall between early June and late October, and the trying months are April and May (before the rains break) and October, when they are coming to a close. Electric fans, ice, and other amenities, however, make life tolerable even in these months, and Rangoonites of the seventies and eighties would consider the present conditions Elysium as compared with their own. The temperature seldom rises above 96 and averages about 80 at 8 a.m. and 90 or upwards at 4 p.m., with a drop to 60 or 58 at 8 a.m. for a few days in late December and early January. Motor cars are a necessity, not a luxury, and the once fashionable "tum-tum" or Victoria is now seldom seen. A break in the rains occurs in July or August, when the atmo-

sphere becomes very humid and everything (and everybody) is stuffy. The legend that mushrooms grow on one's boots during the rains still awaits confirmation, but daily attention to all leather articles by one's "boy" is essential if they are to be kept in good condition.

Political.

Among the recent developments of political life in Burma is a desire for separation from India. This is considered possible on all grounds except



[Photo. J. M. H. Samuels.]

LOWER PHAYRE STREET, RANGOON.

that of frontier defence, concerning which a spirit of easy optimism prevails. Financially Burma would benefit greatly, for the Customs revenue in Burma is considerable, and the whole of it, together with the income tax (a rapidly growing item of revenue), goes to India, which in return supplies Burma with troops. The Burma Military Police, a force about 15,000 strong, trained and equipped on military lines, is paid for by the province to the extent of more than half its cost, and replaces British and Indian troops for frontier defence and internal security.

The delay and neglect of India in dealing with Burma affairs, the long distance of Burma from Simla and Delhi, and the ignorance of Burmese affairs which the Government of India, occupied with larger and nearer problems, has displayed, all contribute to the desire for separation and self-assertion as a unit of the British, not the Indian, Empire.

Political life began to develop after the famous declaration of August 20th, 1917, when the progressive realisation of responsible government was declared to be the British policy for India. Just before then a Committee, mainly Burmese, appointed by the Lieutenant-Governor, had actually declined to ask for the Legislative Council to be made elective, it having hitherto and since been nominated except for two commercial representatives. After the declaration of August, 1917,

things began to move, and a deputation from various Burmese associations went to Calcutta in December of that year to put before Mr. Montagu and Lord Chelmsford their wishes, which amounted to separate treatment of Burma from the rest of India. This was accepted and a new Lieutenant-Governor produced a scheme which did not meet with popular approval. Two deputations of Burmans went to England to lay their case before Parliament; the Lieutenant-Governor and the Government of India prepared modified schemes; but finally the India Office fell back on the policy of treating Burma the same as the rest of India. The final proposals, although they have not satisfied the Burmese politicians, are undoubtedly liberal. The franchise is on a low qualification, which has given the vote to nearly two millions out of between 10 and 11 millions (portions of the province and all the Shan States being excluded from the reforms). The vote is given to women who possess the necessary qualifications. Indians and Karens are given special representation, and the number of subjects transferred to public control is greater than in India, including forests (which yield over Rs.2 crores revenue and are a growing asset) and education. Despite this very liberal scheme, which is ahead of the other Indian provinces in all respects, there is a demand for "Complete Home Rule," a catch phrase which those who use it cannot define. Experience has shown that the extremists are always dissatisfied with each progressive scheme and keep on asking for more. A boycott of the new Legislative Council of 103 members was threatened, but its fulfilment



[Photo. D. A. Adams.]

CANTONMENT GARDEN, RANGOON (Shwedagon Pagoda in the distance).

political genius of the people, if they will exercise the sturdy common-sense which those who know them best claim to be behind all the nonchalant gaiety and recklessness for which they are more generally known. In the forests they have a treasure which only needs care to become a great source of income for all time. Development in other respects is afoot with every encouragement from Government. Search is being continually made for the province's one great need—coal (most of the Burma coal is very "young" and therefore friable) and measures for the improvement of the capital are being considered.

The Port and Its History.

As already mentioned, Rangoon became a regularly established port in 1853. For many years afterwards a Government flotilla was maintained for the conveyance of troops and Government stores on the Irrawaddy River, together with a dockyard and workshops at Rangoon for repairing the steamers and flats, etc. Both flotilla and buildings were taken over in 1864 by the Irrawaddy Flotilla Company, Ltd., which has now a very large fleet of river craft.

Rangoon became the seat of the local Government in 1862. It had made but moderate progress as a port during the preceding ten years of British occupation. A lightship had been placed at the mouth of the river (in June, 1852), and a wooden wharf had been built in the port itself (in 1859). The earliest statistics readily available are for the official year 1861-62. In that year the receipts of the Rangoon port fund, including Rs.5,174

of the imports in the year already mentioned was Rs. 1,23,87,679, and of the exports Rs. 1,40,26,752, a total of Rs.2,64,14,431.

The report of the working of the Rangoon Port Trust during 1926-27 shows that the receipts amounted to Rs.79,68,000, and the expenditure to Rs. 77 lakhs, showing a surplus of Rs.2,68,000. Compared with the previous year, the receipts show a decline of about Rs. 6 lakhs, but this is due to the reduction in the rate of the river due on



[Photo: J. M. H. Samuels.]

UPPER PHAYRE STREET, RANGOON.

all goods discharged from or shipped into sea-going vessels from 7 annas to 5 annas which took effect from August, 1926.

The total tonnage of the sea-borne trade was a little less than 5 million tons, of which about 3½ million tons constituted exports. The total number of vessels entering the port was 1,439. Compared with the previous year, there was a small decline in the tonnage as well as in the number of vessels.

Calcutta, Bombay, and Karachi take precedence of Rangoon as regards volume of trade, but in respect of value Rangoon comes third on the list of Indian ports. It should be understood that Burma has no monopoly of the rice trade; its strength lies in the production, well above all local needs, of a very good second quality rice, which the millers can turn into European quality, Straits quality, and other varieties, the milling methods being adjusted according to the nature of the demand.

The Gulf of Martaban receives three important rivers, the Irrawaddy (of which the Rangoon River may be considered one of the many mouths), the Sittang, and the Salween. Each brings with it large quantities of silt, so that the traveller approaching Rangoon either from Calcutta on the north, Colombo on the south-west, or the Straits on the south, will notice the muddy colour of the water before the low flat coast of Burma is sighted.



[Photo: D. A. Ahuja and Co.]

VICTORIA PARK, RANGOON.

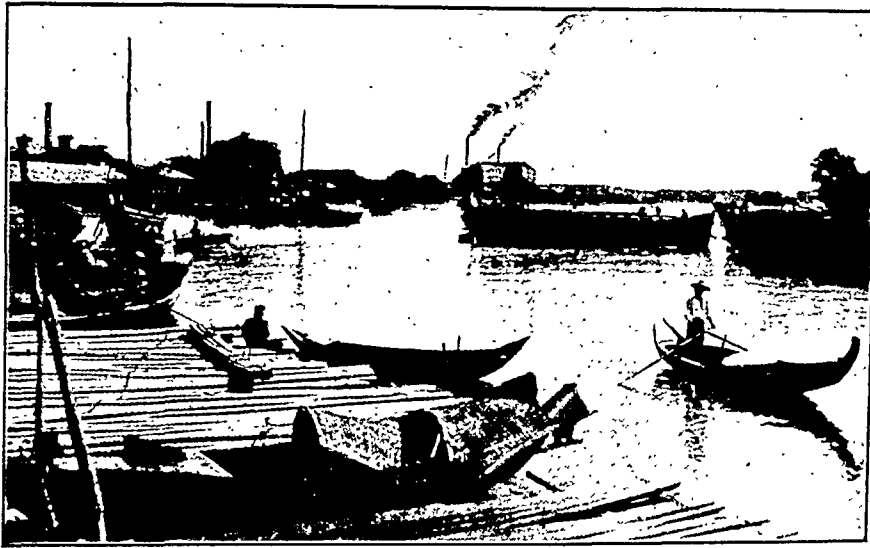
(Shwedagon Pagoda in the distance).

wharfage, aggregated Rs.60,072, "showing an increase of nearly 100 per cent. over the previous year"; and the expenditure amounted to Rs.44,940, most of which was on account of establishments, stores, and repairs to the light-vessel and boats. The number of vessels which entered the port in 1861-62 was 438, with a tonnage of 157,472, equal to 340 tons per vessel. The bulk of the trade at this time was coastwise, but few vessels entering the port direct from foreign countries; and most of the goods were landed on the bank of the river from cargo boats. The value

Between Burma and the Andaman Islands is the Andaman Deep, one of the greatest holes in the sea floor of the globe; and visitors to Rangoon who experience an occasional shock of earthquake are usually offered the following explanation: The silt brought down by the rivers is carried far out to sea, and lies upon the lip of the Andaman Deep, where at times the accumulation falls into the hole, the resultant shock producing an earthquake in Lower Burma. This explanation may or may not be true, but it serves. The earthquake shocks seldom do much damage beyond broken crockery and glass; but a shock in September, 1918, brought Thomas Cook and Son's building much closer to the adjoining structure than it was before. Through the "made ground" of Rangoon runs a spur of laterite diagonally from the north-west of the town to Monkey Point on the river bank south-east, the buildings on which

Wireless telephonic communication between the pilot vessel and the Port Trust office was established and brought into use from December 1st, 1926. In view of the contemplated closing of the Elephant Point telegraph station, a scheme is being prepared to provide for the use of the installation for the transmission of shipping intelligence.

One important question regarding the port was in regard to the serious effects on the maintenance of Rangoon as a deep-water port, which may be expected to result from the river training operations being carried out by the Forest Department at the headwaters of the Rangoon River. After consulting their engineers in London, the trustees decided in 1927 to urge the early constitution of a competent authority for the administration of the Irrawaddy and Rangoon Riversystems, in order to effect co-ordination of conflicting interests and



["Rangoon Times" block.

PAZUNDAUNG FOOL, RANGOON.

are usually not affected. Artesian wells sunk in this laterite yield good fresh water, which is used by the local mineral water manufacturers.

The approach to the Rangoon River from the sea is provided with several lights and lightships, on the reefs and shoals off the coast and at the entrance to some of the mouths of the Irrawaddy, which are in the charge of the Royal Indian Marine at Rangoon. Cape Negrais, at the south-west corner of Burma, has been the scene of some bad wrecks, and it has been frequently suggested that more powerful sound and light signals should be placed around the coast so as to aid navigation, especially the shoal lightships, which some experienced mariners think should be well away from their present situation. The Rangoon River itself is kept constantly under observation by the River Survey staff of the Port Commissioners, and the pilot service is well maintained, upwards of twenty pilots being engaged, with harbour masters to take charge of the vessels on arrival at the inner harbour and direct them to the moorings.

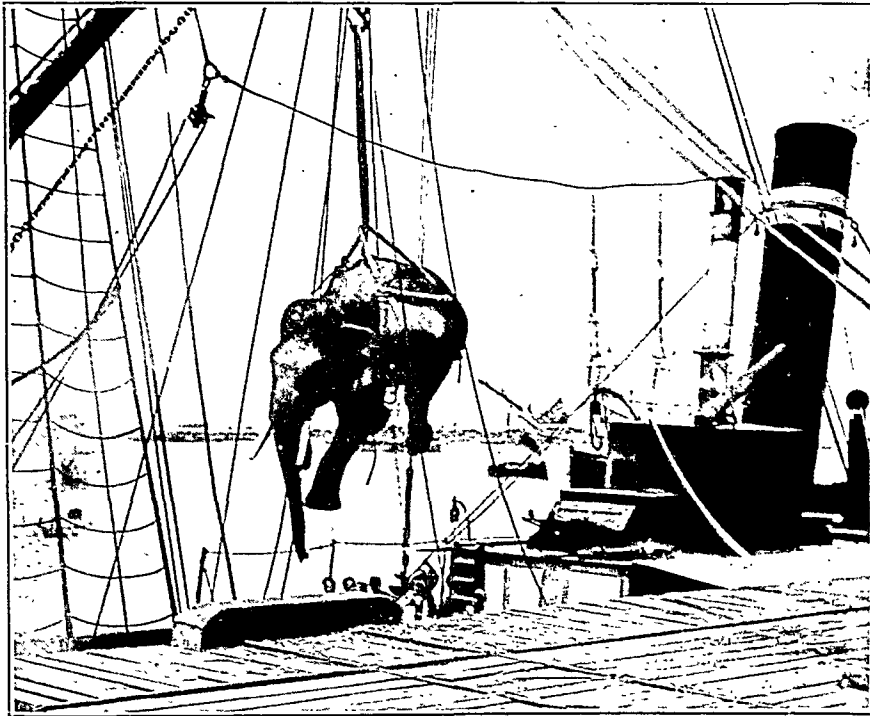
the acquisition of experience and practice. In the opinion of the trustees such an authority is required to formulate proposals for the investigation of various problems and to direct such surveys and other requirements as are considered essential by the Departments concerned.

The Port of Rangoon consists of the harbour proper, or what may be described as the inner harbour, where the Rangoon River is some 800 yards wide, and where are provided 14 swinging and 8 fixed double moorings for sea-going craft. To reach the harbour all vessels have to cross the Hastings Shoal by the Monkey Point Channel, which is maintained by constant dredging, and can be entered at certain states of the tide by vessels up to 33 feet draught; but these deep vessels cannot be accommodated to that draught in the harbour, with the result that they are obliged to complete their loading below the Hastings Shoal, where the Commissioners maintain five swinging and six fixed moorings. The

Hastings Shoal is situated below Rangoon at the junction of the Rangoon River, the Pegu River, and the Pazundaung Creek, and for very many years has been a serious menace to the Port of Rangoon. Erosion of the river bank has been taking place for years, and the Hastings Shoal has at the same time enormously increased in size.

Since the war a number of proposals have been made in connection with the port's development, and these have culminated in what may be described as the Dawbon Dock Scheme.

vide a total of 48 berths. Adjacent to the docks will be a large area for produce, timber and mineral depôts, whilst between the "port" area and the city of Rangoon there will be approximately 1,000 acres available for housing and general industrial development. The whole will be adequately served by rail, affording direct connection between the docks and the main railway system of the province. The scheme is primarily designed to provide for rail-borne traffic, but eventually every facility for all kinds of port traffic will be given.



["Rangoon Times" block.

PASSENGER AND HIS TRUNK AT RANGOON.

Dawbon Dock Scheme.

The Dawbon Dock Scheme is a complete departure from any attempt to meet the problem of expansion by continuing on past methods. While retaining all the existing accommodation in the harbour and remodelling it to better advantage, it includes the construction of deep-water docks, available for entry at all stages of the tide, which will provide for overseas shipping without crossing the Hastings Shoal.

The land required for the purpose lies immediately to the east of Rangoon at Dawbon, separated from the city proper by the Pazundaung Creek, a narrow waterway some 600 feet only in width. On the banks of this creek are numerous mills, on the Rangoon as well as on the Dawbon side, and railway connection already exists between the provincial main line and Dawbon. The area to be developed approximates 2,000 acres, and is low-lying paddy land entirely utilised for agricultural purposes, which, it is anticipated, will be inexpensively acquired. Out of this area some 600 acres are earmarked for docks. Expansion over the whole reserved area will eventually pro-

Two bridges are projected to connect Rangoon and Dawbon to carry tramways and vehicular traffic of every description. On the Pegu River side of the docks will be a depot for inland vessels and for coal, the latter served by rail and by jetties for direct unloading and for bunkering by lighters. The outer entrance to the dock will serve as a tidal basin in which the largest ships can lie in slack water before passing through the lock-way, and will be approached by a short dredged channel with a depth of 35 feet at low water of spring tide. The entrance lock will have a width of 80 to 100 feet, and a dry dock will be provided alongside capable of taking the largest ships ever likely to visit the port. On one of the quays at the outer entrance a passenger station will be located, connected with the main railway system. In the immediate vicinity land will be available for workshop sites, and the Commissioners propose to establish their own workshops and slipways in the neighbourhood of the dock entrance.

The fulfilment of the Dawbon Dock Scheme will at once set free much foreshore on the harbour that has hitherto been earmarked for traffic de-

velopment, and it will be possible to give much-needed relief to the congested Indian, coasting and inland water-borne traffic by utilising the facilities that have had to be reserved for the foreign traffic. The Dawbon Dock Scheme proposals will be in augmentation of the existing port facilities, and moorings will be maintained in the harbour for vessels to load direct from lighters; but the volume of rail-borne traffic in minerals, timber, cotton, grain, seeds, etc., for overseas will steadily increase and will be diverted to the docks, where the adjacent depots will provide for the occupation of merchants' godowns where re-bagging, cleaning, and pressing operations will be possible.

Only those acquainted with the Port of Rangoon will realise what a weight will be lifted from the shoulders of the port authorities, shipowners, and mariners by the new dock scheme in so far as it avoids the necessity for crossing the Hastings Shoal, and the cost of making and maintaining a deep-water channel across it and into the inner harbour which would involve large expenditure

without providing any new source of revenue or increasing accommodation in the port. It is estimated that the Dawbon Dock Scheme will more than pay for itself, and will provide for unlimited and inevitable expansion of provincial trade. The scheme will directly benefit the cultivator, and, it is anticipated, will have an immediate effect in a reduction of shipping costs. It is being projected in close association with the Rangoon Development Trust which, for its part, will undertake development for housing and industrial purposes.

The works are now in progress, but it is anticipated that some years must elapse before the new dock will be in a condition to receive shipping. When, however, the growth of Rangoon in the past generation is visualised, the necessity is obvious for undertaking a generous scheme of dock development at the capital of a province with great capacity for expansion in every direction. Briefly, the Dawbon Scheme will, when completed, place Rangoon in the select list of the world's best equipped, most efficient, and most prosperous ports.

It is well known that snakes do not masticate their food and are capable of swallowing animals of a girth much greater than their own. Seldom does the opportunity occur of capturing a large snake immediately after it has had a big meal, and more rarely do circumstances permit a photographic record in that connection being secured. The picture shows a python, 15 feet in length, and a full-grown female barking deer which was removed from its stomach. The deer, which was covered with slime, had been swallowed only a few hours, and the only evidence of the commencement of digestive action was in the eye-balls, which the photograph shows unnaturally white.

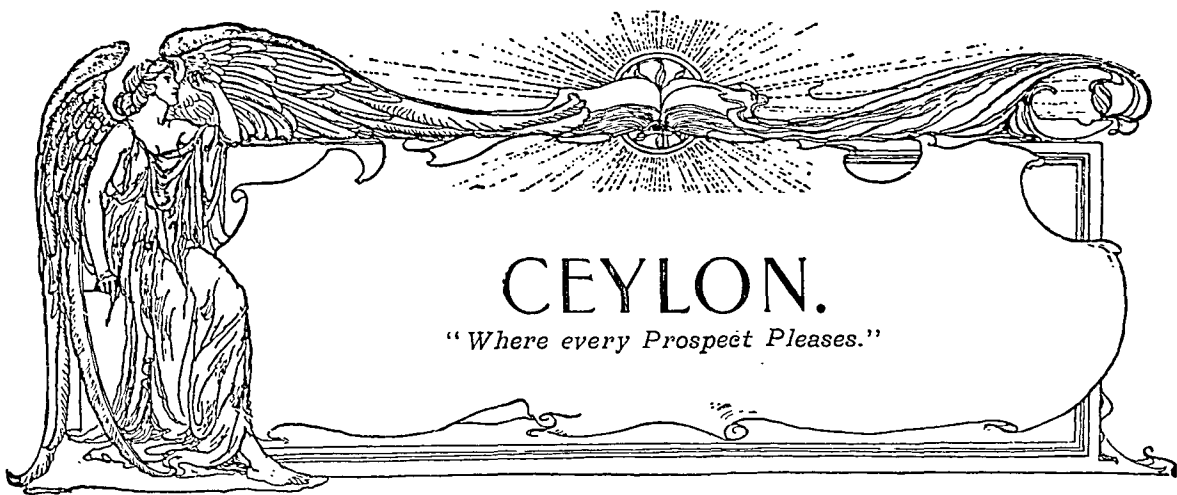
The manner in which the body was arranged for swallowing is an interesting demonstration of the reptile's intelligence. Swallowing commenced at the head; but the hind legs were brought forward with the hooves together against the throat, while the fore-legs trailed backward against the belly and between the hind-legs. Not a bone was broken, and the only injury to the skin was the wound plainly seen on the near foreleg, where the deer had been seized by the snake.

The python was reported by Burmans to be in dense undergrowth in a swamp, and it was decided to take it alive in order to get the skin undamaged. The capture was effected with the stick shown in the picture. A roped noose was attached to the forked end of the stick. The noose was passed over the snake's head (an operation simpler than it may appear), and then drawn tight; the reptile was soon helpless. That the python was still alive when the photograph was taken, immediately after the writhing had subsided, is proved by the distension of the breathing aperture within the mouth.

The capture was made and the photograph taken by Dr. J. Morrow Campbell, on June 12th, 1922, near Baw, about fifteen miles southward from Maymyo, Burma.



A UNIQUE PHOTOGRAPH.



CEYLON.

"Where every Prospect Pleases."

Be not afeard; the isle is full of noises,
Sounds and sweet airs that give delight and hurt
not.

Sometimes a thousand twangling instruments
Will hum about mine ears, and sometimes voices
That, if I then had waked after long sleep,

Will make me sleep again; and then, in dreaming,
The clouds methought would open and show
riches

Ready to drop upon me, that, when I waked,
I cried to dream again.

—Shakespeare: *The Tempest*.

"Lanka, the Resplendent."



LANDFALL is now an outworn thrill, but there is promise of romance in the first far-off glimpse of Ceylon, when the voyager sees Adam's Peak emerge out of the ocean, like the spiked boss of a mighty shield, to lift up a roseate dawn. Let season and hour conspire that the approach to this beautiful island may be a worthy prelude to the delights in store. Dawn and the month of January are the most favourable combination, affording clear skies and softened tones. The

watcher on deck, faring from the North, would for many a night have observed, on the straight run from Aden, the increased declination of the Pole Star and the circling Bear; with the drop of the horizon the famous constellation of the Southern Cross would have climbed into view. As the steamer ploughed eastward he would have seen the western star-groups set more swiftly and the eastern arise ahead of time. That, at any rate, if he were so minded, would be the witness of his eyes to the nearness of lat. 7 N., long. 80 E., which is the unromantic cartographical indication of Colombo's place on the planet. And it were well thus to have an eye for the celestial guide-marks of the old-time voyagers, for, as we shall see, the newest lover of Ceylon is but the latest in a long and varied line. Many are the lands and many the tongues, from the dim past to the present day, in which her praises have been sung.

It is not the dawn silhouette of the central mountain mass alone that makes the first sight of Ceylon memorable. Eye-weary from the desert landscapes lately passed, as we approach up the coast from the south we find relief (and a revelation) in the gladdening verdure that clothes the land from mountain to plain, to ring the gleaming shore with a continuous girdle of coconut-palms; in the glimpses of green and silver coves; blue seas that match the immaculate vault above; or, in the season of the south-west monsoon, great breakers that dash themselves on shore or seawall and veil the land in a scudding drift of foam.

That impression of a shining, verdant isle we shall bear away with us. It will endure when we have forgotten that Ceylon is the land of the ruby, the sapphire, and the pearl, the land of the elephant and the peacock, the land of tea; or when perhaps we have forgotten, what we shall learn, that it is the land of a people with an ancient culture eagerly embracing a new, an understanding and friendly people that has already plucked the fruits of a century of friendship with British missionary, ruler, and colonist. For, as we now enter Colombo's fine harbour, which is entirely the work of human enterprise wresting a safe anchorage out of a wave-torn beach, with all the evidence of a clamorous trade around, we are aware of the green battalions pressing to the brink so as to give jetty and pier and other apparatus of human activity the appearance of an intrusion into Nature's domain with the precarious purchase of a bare foothold on its margin. Red roof and stark chimney, storage tank and hotel façade lie submerged in verdure; church spire and dome and tower stand breast-deep in the green flood.

That is how "Lanka the Resplendent" is first seen. As the twin arms of the bay close around us, we mark the belt of palms fading into the hori-

zon's glare to northward, while in the south Mount Lavinia Head, with its hotel shining in the sun, bars from view, but does not break, the wondrous cincture.

Believed by some to have been the Tarshish of the Bible, whence her ships carried wood for the building of Solomon's temple, and peacocks and ivory for trade; reported to Alexander the Great by his admirals as having a 500-mile coastline and abounding in sea-monsters; swept by hordes of continental invaders; conquered and brought to a high pitch of development by the dynasty of one

Sinbad the Sailor figures as the type of the men who have praised the hospitality of her people; visited by Marco Polo, who tells how Kublai Khan coveted the king's ruby and obtained a dish of green porphyry, a relic of Adam; closed to European traffic by the Arab mastery of the Indian seas; linked with Venice in the heyday of her prosperity by a trade agreement; accidentally re-discovered by Portuguese seamen and thus once more drawn into the main current of European affairs, until after centuries of vicissitudes, in which statecraft saved her from one invader to throw her into the



[Photo: Plâté, Ltd.]

SHADOW OF ADAM'S PEAK THROWN ON BIBLE ROCK AT SUNRISE.

such, a royal scion; converted to Buddhism, a faith to foster which was extolled as the highest kingly virtue and the glories of which, as sung in the ancient chronicle (itself a unique boast among Indian countries), were one with the glories of her kings; drawn into the main stream of history by embassies to Rome, whose chronicler, Pliny, has recorded one, and Marcellinus another; mapped by Ptolemy, the geographer, upon information elicited from Phœnician and Arab merchants; visited by the much-travelled Chinese monk, Fa Hien, for the purpose of consulting the sacred books; busied in the ways of commerce while no town in northern Europe had yet received its charter; scene of an Arabian Night's tale, in which

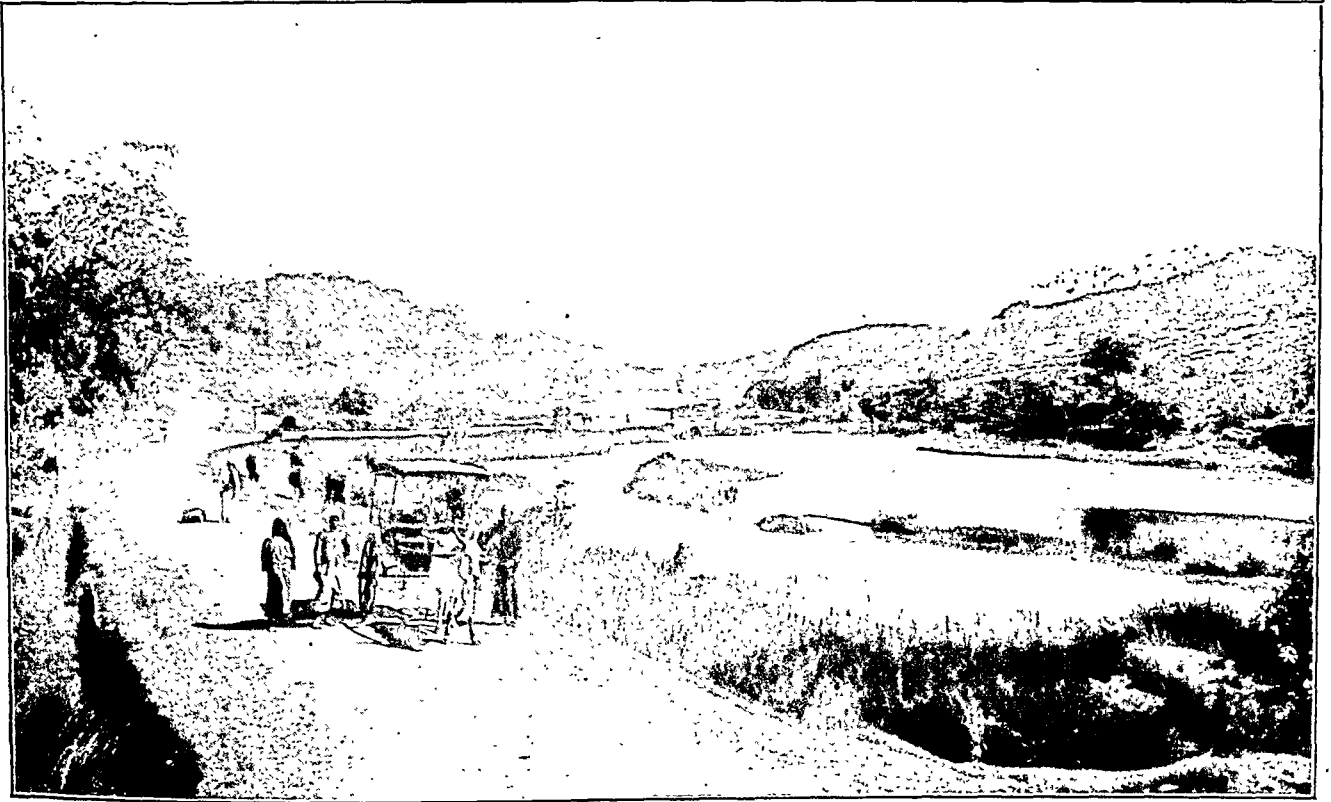
hands of another, the chances of the Napoleonic wars and the balance of parties brought England here as the successor of the Dutch, to carry on the enterprise they had barely begun, Ceylon has in the last hundred years and more been firmly set on the broad highway of peaceful progress and development, worthy of her fair repute in literature.

It is of *Lanka* (the Resplendent Isle), the 'Golden,' the 'Divine,' as the ancient Eastern poets have variously styled her, *Sinhala dvīpa* (the Land of the Lion Race), name later corrupted into Serendib, Ceilao, Ceylon, the *Taprobane* of the Greeks and Romans immortalised in Milton's line, that Sir Emerson Tennent, Colonial Secretary and Lieutenant-Governor between 1845 and 1850,

wrote: "There is no island in the world, Great Britain itself not excepted, that has attracted the attention of authors in so many distant ages and so many different countries as Ceylon; there is no nation in ancient or modern times possessed of a language or literature, the writers of which have not at some time made it their theme. Its aspect, its religion, its antiquities and productions, have been described as well by classic Greeks as by those of the lower empire, by the Romans, by the writers of China, Burma, India, and Cashmere, by the geographers of Arabia and Persia, by the mediæval voyagers of Portugal and France, by the

Topography.

Ceylon is roughly a pear-shaped island, with the "stalk" end to the north, pendent from the southern end of the continent of India. In area it is about 25,000 square miles, rather less than Ireland; its length north to south is about 270 miles; its greatest breadth about 140 miles. The whole of the coast line is low and sandy, and the northern half of the island from sea to sea is a vast unbroken plain. In the remaining portions of the country the low lands extend inland for distances up to 70 or 80 miles, to the foot of the central mountain mass, which covers an area of over



[Photo: Plâté, Ltd.]

KANDAPOLA ROAD, NUWARA ELIYA.

annalists of Portugal and Spain, by the merchants and adventurers of Holland, and by the travellers and topographers of Great Britain. . . . The Brahmans designated it by the epithet of *Lanka*, 'The Resplendent,' and in their dreamy rhapsodies extolled it as the region of mystery and sublimity; the Buddhist poets gracefully apostrophised it as a 'pearl upon the brow of India'; the Chinese knew it as the 'Island of Jewels'; the Greeks as 'The Land of the Hyacinth and the Ruby'; the Mahomedans, in the intensity of their delight, assigned it to the exiled parents of mankind, as a new elysium to console them for the loss of Paradise; and the early navigators of Europe, as they returned dazzled with its gems, and laden with its costly spices, propagated the fable that far to seaward the very breeze that blew from it was redolent of perfume."

4,000 square miles. On the north the hills rise precipitously from the plains, less abruptly on the southern and western sides. The general trend of the ranges is south-east to north-west, showing that the lifting forces came from the south-west.

This mountain region is of great natural strategical strength. The circuit of its wall is unbroken, and access to it is to be had only by a few passes. The best known of these is Kadugannawa, by which the railway and road reach Kandy from the west coast. The south-eastern portion of the hill country, called "Uva," consists of a rolling plateau encircled by higher hills: the remaining and larger part presents a series of steep tumbled mountains intersected by long and narrow valleys, and only in two places are there considerable towns, situated in "cups" among the hills. These are Kandy (1,600 ft.) and Nuwara Eliya (6,200 ft.).

the hill-stations of the colony. Kandy is famous in history as the stronghold and last retreat of the Sinhalese kings. The highest mountain peaks range from Adam's Peak (about 7,350 ft.) to Pidurutalagala (8,300 ft.), the highest point in the island, a noble mountain overlooking Nuwara Eliya.

Climate.

The surrounding ocean and the mountains determine the climate of Ceylon. In all parts the temperature is remarkably even: in the low country the variation is only from warm to warmer: in



[Photo: Plâté, Ltd.]

SINHALESE GIRL.

the mountains from cool to cooler. The rainfall is liberal, and there are two well-defined rainy seasons for monsoons—north-east, October to December, and south-west, May to June. The former monsoon is the more general in rainfall effect over the whole island. The mountains rise less abruptly and at a greater distance from the sea in the eastern side, and hence the rain clouds have a more distributed effect. But, in the south-west monsoon, the rains do not reach the eastern side of the central mountain range, and the vapours are condensed against the abrupt western slopes. This process may often be seen strikingly illustrated during the railway journey eastward from Pattipola, the summit of the railway, towards Uva. The railway passes through a short tunnel under the crest of a mountain. Approaching it, the train passes through heavy rain and mists. In a few minutes it emerges on the other slope of the mountain, and the "rolling plains" of Uva are

disclosed to the traveller under a smiling sun and blue sky. From the situation of the mountain "massif" and its effect on the rainfall, arises the climatic differentiation of "dry zone" and "wet zone" in Ceylon. The former broadly consists of the eastern and northern plains, the latter of the west and south-west low country and the mountain region. But it is a difference of small degree when compared with the wide divergence prevailing in a continent like India. From the driest to the wettest region the range of average rainfall is from about 25 ins. to about 180 ins. per annum. The result is that in striking contrast to the vast, arid deserts of India, even the "dry zone" regions of Ceylon are covered with forest and vegetation which presents throughout the year an appearance of fresh verdure.

Flora.

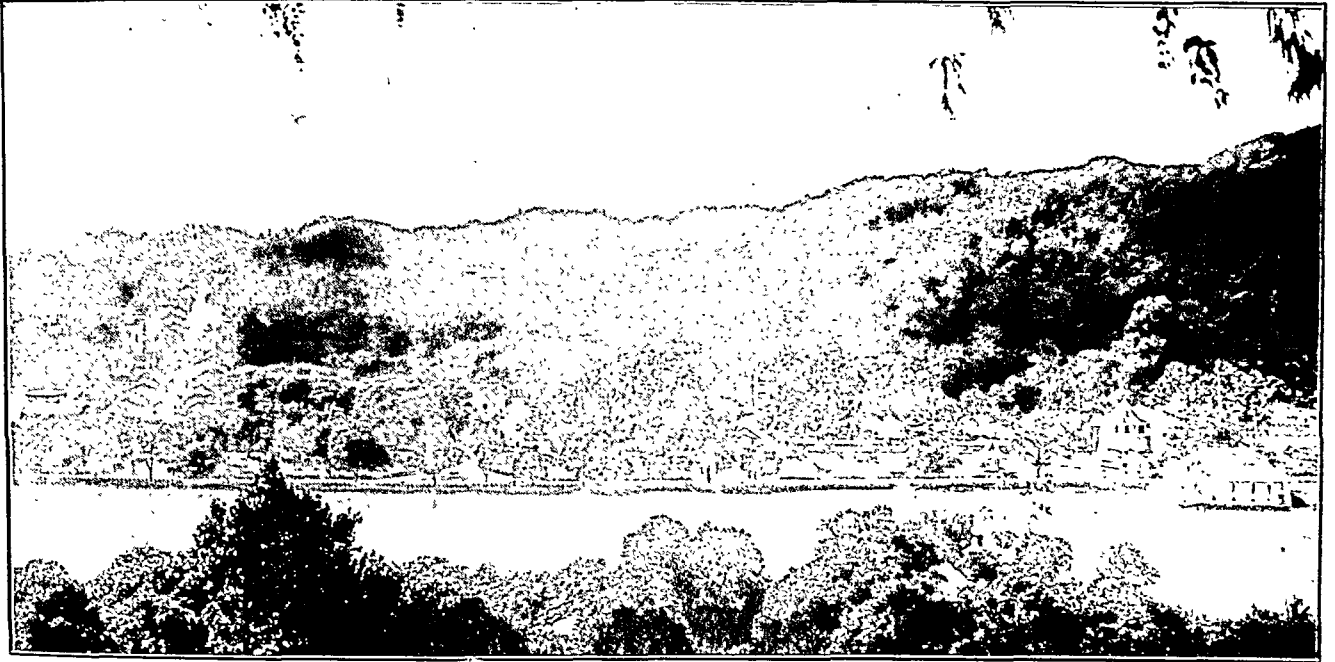
The opulence of the vegetation is revealed by the fact that while Ceylon is smaller than Ireland it has 3,000 species of flowering plants and ferns, which is three times as many as the British Isles can boast, while that number does not include the mosses and fungi, etc., not yet fully surveyed, but likely to yield an equal number again.

The dry northern zone, as determined by the position of the mountains, approximates more nearly to the character of South India, while the flora of the wetter districts is Malaysian. Briefly, the coconut yields place to the palmyra palm. Indeed, there are not wanting those who find a new beauty in the coastal landscapes of Jaffna with its tide-flats and clumps of palm.

The whole of the wet low country was once under forest, but there has been a great waste of this capital on the part of the villager, who fells, burns off, and then scratches the surface of the ground for a few scanty crops of poor grain. Modern forest conservation has been in time to prevent excessive denudation of the uplands for tea and rubber.

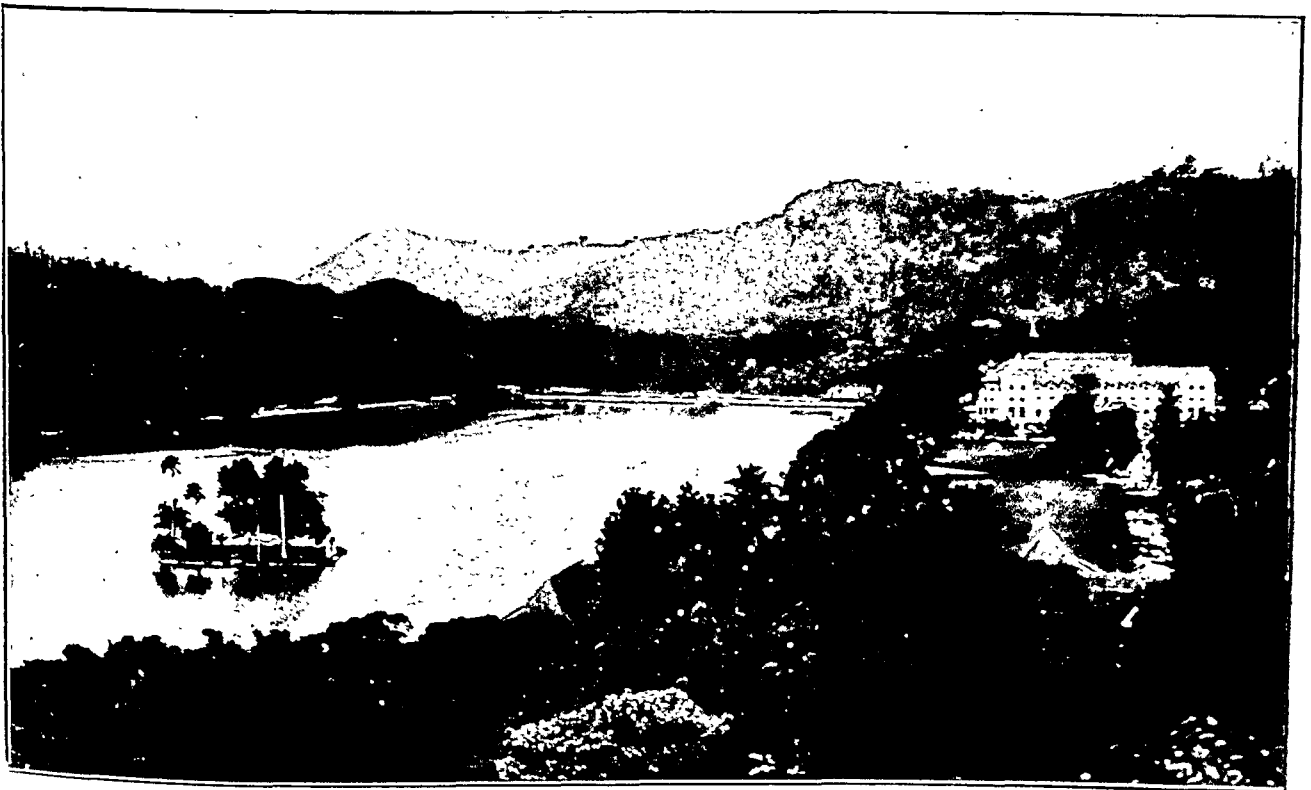
The forests are equatorial and evergreen. The tall trunks of the hard-wood timber trees are smothered in a rank undergrowth, under which again a wealth of herbs is found; in the higher forests European buttercups, brambles, violets, and valerians make their appearance.

The proportion of endemic species (30 per cent.) is very large for a continental island, but it is not these that contribute colour and beauty to the commonest gardens, so attractive to the visitor: flamboyant, temple-tree, shoe-flower, allamanda, croton, lettuce-tree, even the coconut and arecanut palms, are all aliens. Some of these, like the lantana and the sunflower, have overrun the country, last of the island's many foreign invaders! Acacias, wattles, conifers, and grevilleas, have been successfully introduced in the higher uplands. But one must not fail to notice certain remarkable plants that are native to the country, namely, the na, the ixora, and the murata. Ferns, like the maidenhair and the gold and silver ferns, hothouse specimens of temperate climes, add a



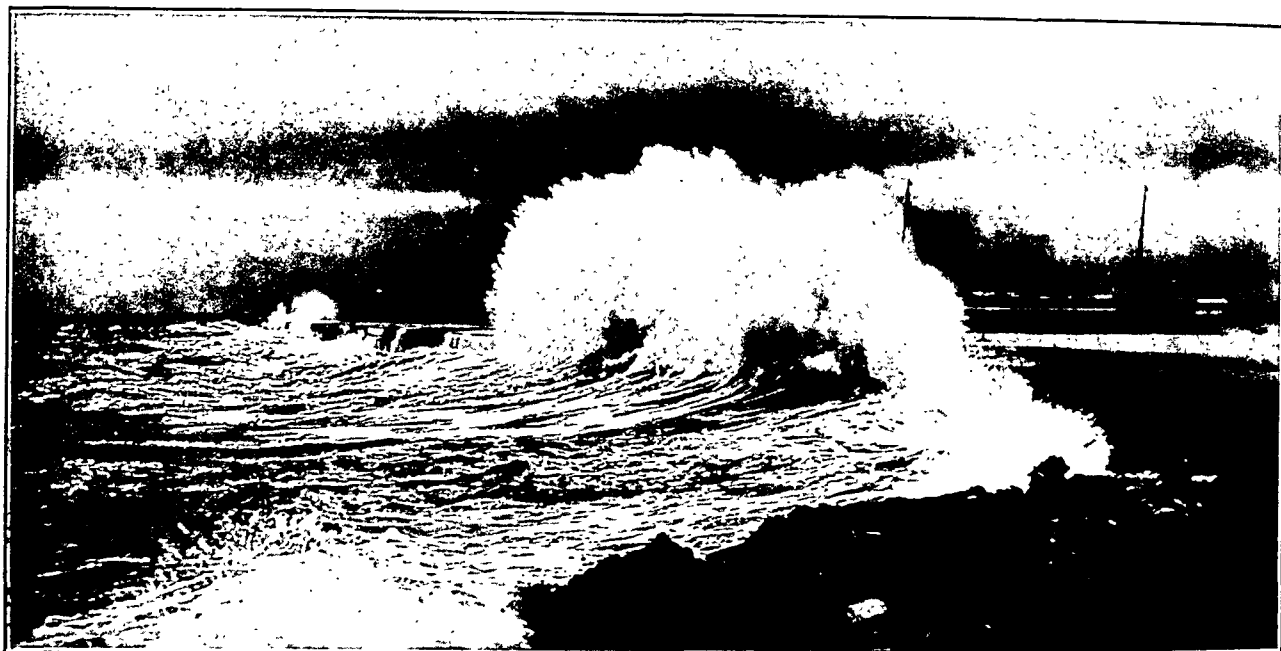
[Photo: Plâté, Ltd.]

KANDY, THE BEAUTIFUL LITTLE MOUNTAIN CITY AND ANCIENT CAPITAL OF CEYLON.

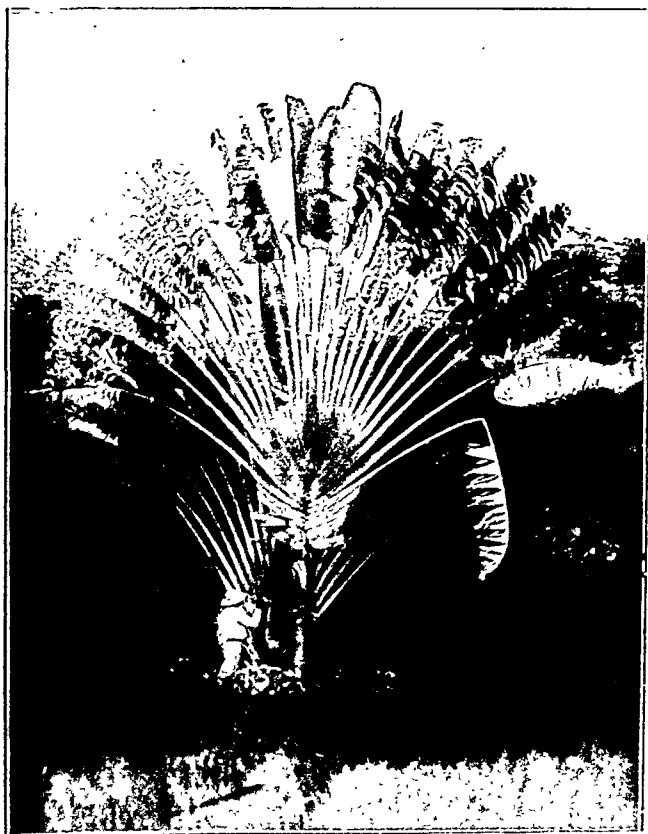


[Photo: Plâté, Ltd.]

KANDY LAKE FROM LADY HORTON'S WALK



MONSOON WAVE STRIKING BREAKWATER, COLOMBO HARBOUR. [Photo: Plâté, Ltd.]



TRAVELLERS' PALM.



CEDAR TREE.

special element of beauty, crowding every cranny.

The fruits are plentiful and delicious, though again mostly of foreign origin. Almost the only natives are the plantain, as the banana is called locally, and the jambu (*Eugenia*). Well-known favourites like the mango, durian, jak, mangos-teen, nam-nam, guava, pine-apple, cashew, papaw, tamarind, lime, shaddock, pomegranate, sapodilla, lovi-lovi, custard-apple, soursop, and avocado-pear, are such as can be obtained anywhere in the tropics. In fact, the whole of the tropical flora can be found here in brief and convenient compass, and scientific men revel in their opportunity.

Fauna.

Coming to the fauna, the leopard and some cats represent the carnivores, while of mammals the elephant fills the largest room. Gone are the glorious days of Sir Samuel Baker, for elephants are now scarcely shot with the gun, unless they have been proclaimed as dangerous and destructive. They share the forests and the grassy plains with the bears, buffaloes, monkeys, peacocks, and pig; the latter is shot in Ceylon, owing to the nature of the country making "sticking" impossible.

The monkeys are notable, several peculiar species being found. The sambhur and some smaller species of deer are threatened with extinction, but game sanctuaries (an attraction for the animal lover as distinct from the sportsman) have been created to preserve these and other wild species.

Cataloguing the rest, there are jackals, hares, porcupines, squirrels, bats, flying-foxes, crocodiles, cobras, vipers, armadillos, porpoises, sharks, and, more rarely, dugongs.

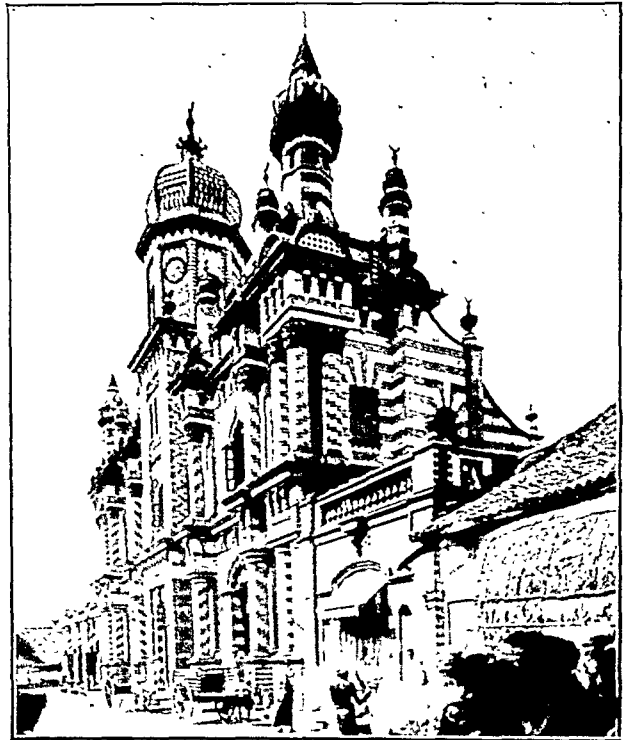
Myriads of aquatic birds of wide distribution are found in the tank country, and in lagoons and salt-marshes. Eagles, falcons, owls, trogons, hornbills, cuckoos, woodpeckers and parrots provide some peculiar species.

Of songsters there is none of any repute in the low country, though the magpie-robin of the garden has surely missed its public; the Nuwara Eliya robin and thrush emulate their European namesakes. The spurred partridge and the jungle cock have a characteristic call. Game-birds are abundant, and the "sportsman" is well provided for. Of garden birds, the tailor-bird and the sun-bird are notable, while in the country the weaver-birds have an interest all their own with their colonies of retort-shaped nests. The talking myna must not be forgotten; but king of mimics is the king-crow, a species of drongo. Thieving crows and sparrows haunt the bungalows. The cuckoo's scream has earned it the soubriquet of brain-fever bird, while the air is vocal with the calls of barbet and bulbul and the cooing of doves. Butterflies abound, though not of remarkable species; swarms are met with sometimes for mile upon mile. Briefly, Ceylon is the Paradise of the

naturalist, and he has not to go far out of Colombo to prove it.

Early History.

Upon Adam's Peak, the apex of the equilateral triangle of the mountains of Ceylon, countless mariners and adventurers from the most ancient times have gazed, and pious pilgrims of four great world religions, Hindus, Buddhists, Mahomedans, and Christians, to this day climb its slopes to worship before the sacred "footprint." Hindus call the mountain "Sivan-adi-padam" (footprints of Siva), Buddhists "Sira-pada" (the sacred footprint); and while Mahomedans travel there to view the spot where, they say, our first



[Photo: Plâté, Ltd.]

MAHOMEDAN MOSQUE, COLOMBO.

ancestor, Adam, trod, Christian pilgrims commemorate the visit of St. Thomas, the first Christian missionary to the East. And it is strange to record that even the insect world is said to be affected by the impulse of a pilgrimage to this renowned peak; for in the hot season of the year, between the N.E. and S.W. monsoons, thousands of yellow butterflies can be seen in the central, northern, and western portions of the island, winging their southerly flight in the exact direction of Adam's Peak. The Sinhalese people have, therefore, an alternative name for the mountain, "Samanagala," which means "Butterfly Rock."

This diversity of people making their way towards the great religious mountain is symbolic of the history of Ceylon; for the island, from its position in the midst of ocean currents and winds, and its easy access from the great continent of India by the 20 mile sea passage, with the rocks variously known as "Adam's" or "Rama's"

Bridge, has been the goal of foreign invaders and adventurers from the beginning of its recorded history. It is a history of racial invasions and conquests from the Indian continent, the defeated inhabitants being gradually driven from the northern plains, then splendidly fertile, into the central mountain region, while the conquerors settled down to enjoy the produce of those fertile lands. Meanwhile adventurers from distant Europe had from time to time visited the island and brought back glowing stories of its wealth. Indeed, there is ample evidence of early knowledge of Ceylon in Europe, and of intercourse between the two. Ceylon was known to the Greeks and Romans under the name of Taprobane; and there have been found in the island Roman coins covering five centuries, and bearing the images of twenty-two of the Roman Emperors. Thus early was Ceylon in some sort of relation to the western world.

In the middle of the fourteenth century it was a country of great wealth and greater potentialities; a country with a long written history kept up in poetic form as the famous "Mahavansa," the chronicle of the Sinhalese race, with kings who held despotic power over a population which was undoubtedly greater than is the population in the twentieth century; with a hierarchy of pious and learned priests who had preserved the Buddhist religion in its purest form for centuries; with royal and sacred cities of vast extent, and adorned by splendid temples and palaces, now in ruins and overgrown by jungle; with vast irrigation lakes which, by a system of canals, fertilised all the northern plain. Of all these wonders only the Buddhist religion and its traditions have survived—its symbol the ancient Bo-tree of Anuradhapura, which, with a recorded history of more than two thousand years, may well be called a wonder of the world. The descendants of the last Kandyan kings live in obscure exile in India; their stately cities of Anuradhapura, Polonnaruwa, and others of their homes in the northern plains, lie buried in jungle; the bunds of their vast irrigation lakes have crumbled; and the lands which they fertilised, once the home of teeming populations, who lived on their produce, are now overgrown with forest and peopled by elephant, leopard, and deer. The miserable descendants of the once prosperous subjects of the Sinhalese kings eke out a precarious existence by cultivations of small forest clearings of "dry grains," and are gradually dying out, a prey to the dread malaria which takes such enormous toll of Eastern people.

But there is another side to this picture. If all this decay has occurred in one portion of the country, and on one side of its activities, there is a wonderful record of progress in the hill country and the southern and western plains; and this of progress achieved under manifold difficulties and in the face of great natural obstacles. This double story is the story practically of Ceylon's intimate relationship to the western world.

The earliest known inhabitants of Ceylon are called in the Sinhalese language by the name of "Veddahs," which means "hunters," or alternatively, "Yakshas" (devils). Within living memory there were still surviving in the remote southern and eastern jungles sufficient numbers of the races, retaining their primitive habits, to furnish study for the eminent ethnologists, Max Muller and Seligman. The number, however, of these pure-blooded Veddahs who still live by hunting alone and retain their original characteristics is now very small, and is decreasing rapidly. There is strong evidence that through inter-marriage in historic times with the Sinhalese invaders, this aboriginal race has had some influence upon the Kandyan Sinhalese (the inhabitants of the mountains), who in many respects differ from the low country, or maritime Sinhalese.

To a country inhabited by such people the first known invasion on a large scale originated from Northern India in about the 6th century B.C., and these invaders, who arrived under their King Vijaya, were the ancestors and founders of the Sinhalese race.

They came from the region now called Behar, near the banks of the Ganges River. They were of Indo-Aryan stock, speaking Pali, a dialect form of the parent Aryan tongue, which was closely related to the "literary," or written, language Sanskrit, and which developed into the modern Sinhalese. It was this same dialect which was the medium of the preaching of Gautama Buddha.

Warlike and adventurous, these invaders had earned the name "Sinhala" (Lion Slayers), and thence comes the title of the race, "Sinhalese." Their conquest of the northern region of Ceylon, and their partial absorption of the aboriginal Veddahs, are illustrated in the legend of Vijaya's marriage to a Veddah princess, who, in the story, later abandoned and driven forth by her husband in favour of a new Indian queen, sought refuge amongst those of her own kin who had retreated into the mountains.

Then followed, about 300 B.C., the greatest epoch in Ceylon's history, the propagation of Buddhism through the visit of Mahinda, son of the great Buddhist Emperor, Asoka, of Northern India. There is little doubt that Mahinda brought with him the authentic Buddhist canon, and under him, and later Buddhist missionaries, the faith spread through Ceylon. From being merely a form of colloquial speech, Pali became a great literary language, enshrining works, devotional such as the "Tripitaka" or Buddhist scriptures, and historical like the "Dipavansa" and "Mahavansa."

Through a time of peaceful development the Sinhalese kings and their people lived in prosperity. Warriors and conquerors were followed by agriculturists and builders. Successive kings built the royal cities, and more productively dotted the country with those vast artificial irrigation lakes which later fell into ruins, and are now being

slowly and painfully restored by the Ceylon Government.

But it could not be supposed that so fair a land, so near, could escape the covetous attention of neighbours in Southern India, themselves warlike, pressed southward by fierce invaders from the Deccan, living in a more inhospitable clime. And so the Tamil invasions began: and thenceforward for many centuries the history of Ceylon centres round the royal city of Anuradhapura, taken by invaders, retaken by heroic Sinhalese kings: a history of battles, of palace intrigues, of usurpations and murders. The ruined palaces, temples, and monuments of Anuradhapura and its sisters, Mihintale and Polonnaruwa, bear authentic testimony to the story of this period, and here the archæological student finds ample scope.

The pressure from India was not to be denied. The Sinhalese were driven southward, and the northern districts of Jaffna and Anuradhapura were more and more peopled by Tamils, or "Malabars." By intermarriage with Tamil princes and princesses the pure royal Sinhalese line disappeared; and by the time of the great European invasions, the kings of Kandy themselves, whose people were considered the Sinhalese *par excellence*, were more Malabar than Sinhalese.

European Invasions and Their Effects.

We may now consider these European invasions and their effects. When the first Portuguese adventurer, Almeida, reached Ceylon in 1505, he found no fewer than seven separate kingdoms in existence: such was the disintegration and decadence that had befallen the country. A few years later the first Portuguese organised an expedition, landed at Colombo, and negotiated a trade agreement with the kings of Kotte, who ruled in the immediate neighbourhood of the place. But the Portuguese aim at that time was not trade, but military glory and Roman Catholic propaganda. And their occupation, lasting nearly 150 years, presents a dark picture of wars, religious persecutions, massacres, broken promises, hostages murdered, and ambassadors betrayed. In these unhappy transactions the Kandyan kings exhibited as much subtlety and vindictiveness as their alien enemies. Leaving aside these "political" events, the Portuguese occupation, which extended only to the maritime low-country districts, to a distance of a few miles from the coasts, has left its traces in forts such as Colombo, Jaffna, Galle, Negombo, in Roman Catholic churches along the coast, and in many family names of Sinhalese, such as Dias, Rodrigo, Fernando, de Soysa, etc. In language, law, and commerce, the Portuguese influence has been very small. It was in the nature of things that the Dutch, the great sea rivals of Spain and Portugal in eastern seas, in the sixteenth and seventeenth centuries, should also endeavour to extend their sphere of influence to Ceylon: and it was in the middle of the seventeenth century that a Dutch expedition arrived at Trincomalee—that

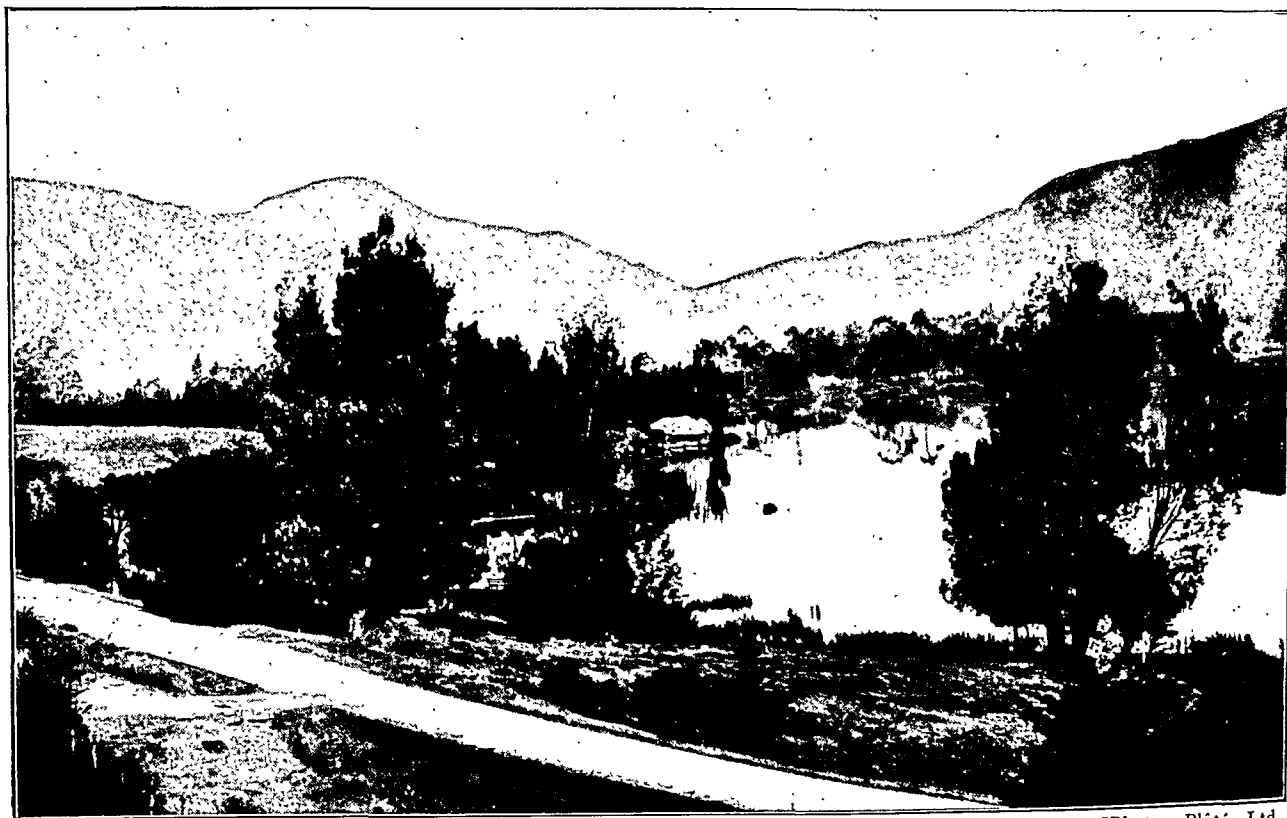
harbour of Ceylon's east coast which faces towards the great eastern possessions of Holland. Under the guise of a friendly mission to rescue the Kandyan king from his entanglements with the Portuguese, the Dutch established themselves in the coastal districts with trade agreements, and in 1658, by means of superior armaments and their alliance with the Sinhalese kings, they were able to oust the Portuguese from their footing, but not until a siege of Colombo fort had called out all the horrors of war—a tragedy illumined by the military conduct of the Portuguese garrison. With the capture of Jaffna in 1658, the Portuguese rule in Ceylon came to an end, and the Dutch became practically masters of the whole coastal region, or low country. The Dutch era differs very materially from the Portuguese: the Hollanders who drove out their great rivals were servants of the Dutch East India Company, and their two great objects were trade and sea power. Thus the Dutch occupation was a period of great expansion of the island's trade, and its people as well as commerce was brought more and more into intimate relationship with the men and ideas of the West.

Trade, industry, development of communications, and education of the people were substituted for military glory and religious propaganda. Thus, although the Dutch rule in Ceylon (1658-1796) was actually of less duration than that of the Portuguese, it has had much more substantial and lasting effects. The Dutch in Ceylon, as in all their overseas possessions, were great colonists: they introduced into the country a regular civil instead of a military administration, many important features of which survive still under British rule. Their people, skilful agriculturists as well as traders, were content to settle down in tropical Ceylon and make it their home. The famous spice cinnamon, which was perhaps the chief product of Ceylon for the European trade, was extensively cultivated by them in the districts round Colombo, some of the gardens being of considerable size. They built canals between Colombo and Negombo, Colombo and Kalutara, etc., which are still in commercial use. Many of them founded Ceylon "Burgher" families which have furnished for more than a century the backbone of the Government and mercantile clerical services, and numerous members of these families have risen to great eminence in the legal and medical professions. But the principal surviving Dutch institution is the Roman Dutch law, which, as in South Africa, forms practically the basis of the colony's civil law to this day.

Successful as the Dutch were in these directions, they were unable to make diplomatic progress, and indeed could hardly maintain ordinary friendly relations with the Kandyan kings, who, in their mountain fortresses, kept up a haughty isolation, harassing the foreigners by intrigues and by irksome restrictions on trade in all the districts where they could make their influence felt. Further, the

very aptitude and concentration with which the Dutch pursued the progressive and civilising arts of commerce, agriculture, and law, rendered them inattentive to the less profitable, but equally vital, question of military safety. For a hundred years after the expulsion of the Portuguese they had no European rivals in Ceylon. England's maritime power and overseas connections were strong indeed, but the energies of the British East India Company were fully occupied with the expansion of their interests in India, and with the long struggle which they waged against the French for supremacy in that continent. During this period the Dutch remained undisturbed in their island possession. But the English rulers of Madras—

"Convention" by which the Kandyan provinces acknowledged the sovereignty of England. The cruelties of the last king were so intolerable that his own chiefs begged for British aid to get rid of him. He was captured and exiled to India, and from that time the British rule of the Kandyan country began. A special charter guaranteeing civil and religious liberty, and the protection of the Buddhist religion, was drawn up, and for a time the administration of the hill country under a "Commissioner" differed slightly from that of the maritime district; but the whole was gradually co-ordinated, and at present, with some small exceptions of civil law, the administration has one system for the whole country.



[Photo: Plâté, Ltd.]

CORNER OF THE LAKE AT NUWARA ELIYA.

though nominally England and Holland were allies at this time—were already, in the middle of the 18th century, exploring avenues towards the acquisition of the prize.

British Advent.

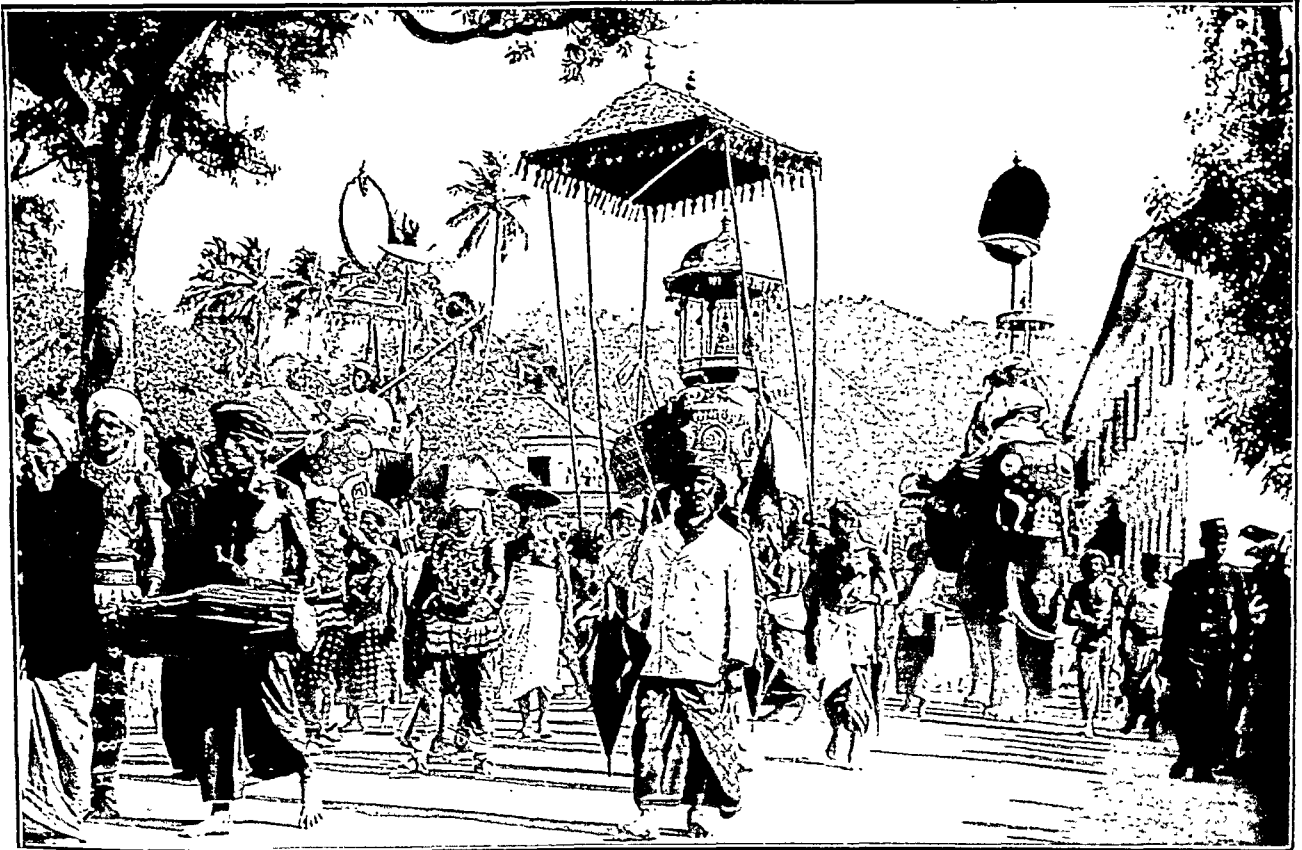
In 1795, when England broke with Holland, a force despatched from India captured the Dutch possessions, meeting with practically no resistance. The capitulation to the East Indies Company took place in 1796. Six years later the maritime districts of Ceylon became the property of the British Crown. It was not long before British Governors turned their attention towards the hill country; but it was the conduct of the Sinhalese kings, rather than the supremacy of British arms, which brought about in 1815 the

Industrial Development.

Heirs to the good work of the Dutch, the British were able to make great progress towards the development of the country and people in the 19th century. Education has always been an important element of their policy. Among early Governors were some notable road builders, who opened up splendid communications from the plains to the hills. Railways and the telegraph quickly made their appearance; and a great impetus was given to the development of the country by the pioneer planters, who pushed their way to the hill country, cleared forests and jungles, and planted coffee. From 1834, ten years after its first introduction, the prosperity of this industry was so rapid and so extraordinary that Ceylon be-

came a great field for the investment of European capital, and the employment of European planters as supervisors of labour. The natives of the country participated in this prosperity; and, as the uses in the western world of the products of the coconut-palm became more and more extended, the 19th century witnessed, in the low country, a considerable expansion of coconut cultivation, mostly by the indigenous population, often at the expense of the ancient cinnamon industry. After a period of remarkable prosperity there followed, fifty years ago, the disaster of the "Coffee Blight," which brought the coffee-planting industry to practical extinction. The story of the

actual cultivation (omitting 1,000,000 acres of pasturage), rubber and tea plantations, together comprise in nearly equal proportions 900,000 acres, and coconut lands more than 800,000 acres. Coconut, rubber, and tea are, therefore, the three main products of Ceylon which have determined its agricultural and commercial development in the last hundred years. The Agricultural Department, now well equipped in facilities for experiment and research, watches carefully for faint indications of any blight or disease which might threaten these industries with a fate similar to that of coffee, but at present, so far as it is humanly possible to predict, there seems no reason to fear



PROCESSION OF THE HOLY RELIC, KANDY.

[Photo: Plâté, Ltd.]

struggles of the coffee planters, many of them rendered penniless, to retrieve their position, of the substitution, first of cinchona (the source of quinine), and then of tea, for the abandoned coffee cultivation, makes a romantic chapter in Ceylon's history. Tea has proved a product not only of great profit to Ceylon, but of vast Imperial importance; and this is true to no less degree of rubber, the cultivation of which has been vastly extended since the first experimental rubber plants were brought from Brazil in 1876. Along with Malaya, Ceylon, with its present exporting capacity of about 60,000 tons of rubber per year, and with more acreages coming into bearing, is an important element in the control which the Imperial Government is able to exercise over the rubber supply of the world. Out of 3,250,000 acres under

any such disaster; nor is it likely, in present conditions, that there will be any deterioration in the world demand for the products in question.

Coconuts, as has been stated, flourish chiefly round the coast. Rubber is cultivated on the slopes of the rainy foothills, mostly in the western, central, and south-western districts, and on lands up to a height of about 2,000 feet.

At the higher elevations tea is the principal product, and there are old plantations at heights up to 7,000 feet or more. But the modern forest policy of the Government, owing to the necessity of regulating rainfall and minimising soil erosion, has dictated a regulation that no land for agricultural purposes, at an elevation of 5,000 feet or more, is alienated by the Crown. This regulation, and indeed the whole land system of Ceylon, de-

pend on the principle that all "forest" lands (including all lands uncultivated over a certain period of years) are the property of the Crown, unless an individual claimant produces some recognised documentary proof of title, such as grants for feudal services by the Kandyan kings, or proof of regular and continuous occupation and cultivation over a certain period. In this manner, Government has had available for sale vast tracts of land. These lands are sold by auction, and the proceeds devoted to public works. At the periodical land sales, blocks of all sizes, from tiny "village" holdings to lands of hundreds of acres, are sold, and the result is that peasants, native gentlemen, and capitalist corporations, are all holders of land.

The progressive success of the three predominant agricultural industries referred to has been reinforced from other industries, less in volume, but still important. Cocoa, cinchona, cinnamon, vanilla, pepper, cardamoms, arecanuts, and tobacco, are all flourishing products.

The island is rich in deposits of plumbago, a mineral essential in the construction of crucibles for the manufacture of high temperature steels. The plumbago market is subject to great fluctuations, which render the industry irregular or spasmodic; but in times of great demand, specially during the Great War, it has been an extremely profitable enterprise.

Here, too, may be noted the periodical pearl fisheries carried on under Government control from the oyster bank off the north-west coast. Ceylon pearls bear a high reputation from pre-classic times; and though the last pearl fishery statistics available, viz., those of 1925, indicate no great source of revenue to Government, or of "Pearls of Price" to the buyers of shell, the oyster banks in question have been, and will be again, a source of great benefit to the country.

Lastly, mention of the precious stone industry must not be omitted. Rubies, sapphires, "cats' eyes," moonstones, and amethysts are the most important. The operations in connection with these are usually carried on by Sinhalese, in and near the beds of certain rivers, on a lease of "Gemming Rights" from the Government. A marvellous discovery of huge sapphires, one being over 700 carats, in a paddy field near Ratnapura, a year or two ago, caused a sensation among gem merchants, and brought the gemmer a fortune in a day.

Revenue and Public Services.

It will readily be understood that so striking a record of prosperity has resulted in a vast increase of the resources at the disposal of the administration for the improvement of the country. Without entering into cumbersome statistics, the figures of revenue in 1874, just before the coffee blight, and at the present time may be quoted. The rise is from thirteen million rupees to over a hundred million rupees. These increasing resources have been employed in public works (harbours, roads, railways, irrigation), in education, in grants to local Government bodies, and in sani-

tary and medical services. Free from income tax, Ceylon is a happy haven for the harassed taxpayer of England. The revenue is mainly derived from "indirect" taxes on imports and exports (so devised that necessities are taxed as lightly as possible and luxuries more heavily), and from services such as the railways and harbours. The ancient polltax of a rupee and a half per male adult levied in lieu of labour on roads, and manifestly unfair in incidence, is now practically in abeyance, and will doubtless shortly disappear altogether.

In the domain of public works, reference may here be made to the roads, which are numerous and of a quality far superior to most Indian roads. They are furnished, every dozen miles or so, with excellent "rest-houses" maintained by Government for the accommodation of travellers. The road system is continually being extended and improved.

As to railways, there is a broad gauge line along the west and south coasts, with Colombo as centre, nearly 200 miles in length, and this will be extended. The main line up-country runs from Colombo to Badulla, about 160 miles, and serves the great tea districts. A northern line runs to Anuradhapura, and thence in two branches, one to Jaffna, and one to Talai-manar, for the 20 mile ferry to the South Indian Railway. The length of this northern line is over 200 miles, and a speedy journey of 24 hours can be made to Madras.

A short narrow gauge railway runs up the valley of the Kelani River to the tea and rubber districts below Adam's Peak. Finally, a steam-tramway, to be replaced, when required, by a more substantial line connecting the Northern Railway with Trincomalee on the east coast, has recently been completed, its length being over 100 miles. It is hoped that the opening of this line, and the branch line to Batticaloa, will result in a great agricultural development of the district, now practically jungle, through which it passes.

Education.

Education absorbs yearly more and more of the available revenue. There is an establishment of English and vernacular schools throughout the country, and the various religious bodies maintain good secondary schools, which receive State assistance. In Colombo there are higher schools of training for the legal, medical, and engineering professions; and in the near future Ceylon will possess a State endowed University.

In the matter of medical and sanitary services, Ceylon may fairly claim to take its place among the most fortunate countries. There is a State medical service, with trained apothecaries in every considerable village, and with free hospitals, staffed by qualified doctors and nurses, dotted all over the island. The General Hospital in Colombo is equipped in an up-to-date manner, and is constantly being extended, and there is a Pasteur Institute for bacteriological work.

The most prevalent and deadliest disease in Ceylon is malaria; and to cope with it and other

tropical diseases a campaign of education in public health has been started. Another scourge of the East, *Anchylostomiasis* ("Hookworm"), is being combated jointly by Government and by the doctors of the Rockefeller Institute.

Modern Progress.

Such progress has been rendered possible, not only by the availability of ample resources, but by the co-operation and goodwill of the people themselves. From the outset of the British rule, the ancient chiefs and their descendants, and to an increasing degree the educated classes, were taken into the administration, and local organisations were adopted, as far as possible. By the creation of municipalities, such as Colombo, Kandy, and Galle, and of urban District Councils and Local Boards throughout the island, local self-government has been fostered. At the same time, the element of popular representation in the Legislative Council, Ceylon's Parliament, has been so extended that at present the elected representatives of the people have control over the public purse, and unofficials are included in a semi-ministerial capacity in the Governor's Cabinet. It is, indeed, probable that in a few years Ceylon will acquire the status of a self-governing colony. In this process Ceylon has happily escaped the political storms which have convulsed India. It remained untouched by the Mutiny of 1857; its only connection with those events being furnished by the fact that Henry Lawrence, buried far away in Lucknow, was born in the little fort of Matara, in the extreme South of Ceylon.

The peaceful and non-aggressive character of the Ceylonese people, and the comparative ease of climatic and economic conditions, have contributed much to the tranquillity of the country under British rule.

Population.

But it is not to be supposed that all is prosperity and that there are no problems for solution. The centre of gravity of the agricultural population has shifted south, but it is not the Sinhalese who have moved. The overwhelming majority of the labourers on the large tea and rubber estates are Tamils from South India, and this applies in the industrial concerns of Colombo, too—of a total population of about 5,000,000 more than 600,000 are immigrant Indians. Further, the only populous district which supports a totally *native* population, without extraneous capital or alien people, is Jaffna; and again, the natives of Jaffna are Tamils. Petty traders both in towns and villages are nearly all Moormen (Mahomedans from South India); the large importers of foodstuffs are Indians from Bombay and Calcutta; the local financiers are Chetties, a small South-Indian community of money lenders. Thus the Indian invasion still goes on, and the Sinhalese is gradually being pressed out of his position as a peasant proprietor. The Ceylon Law of Inheritance, too, has contributed to this process; instead of primogeni-

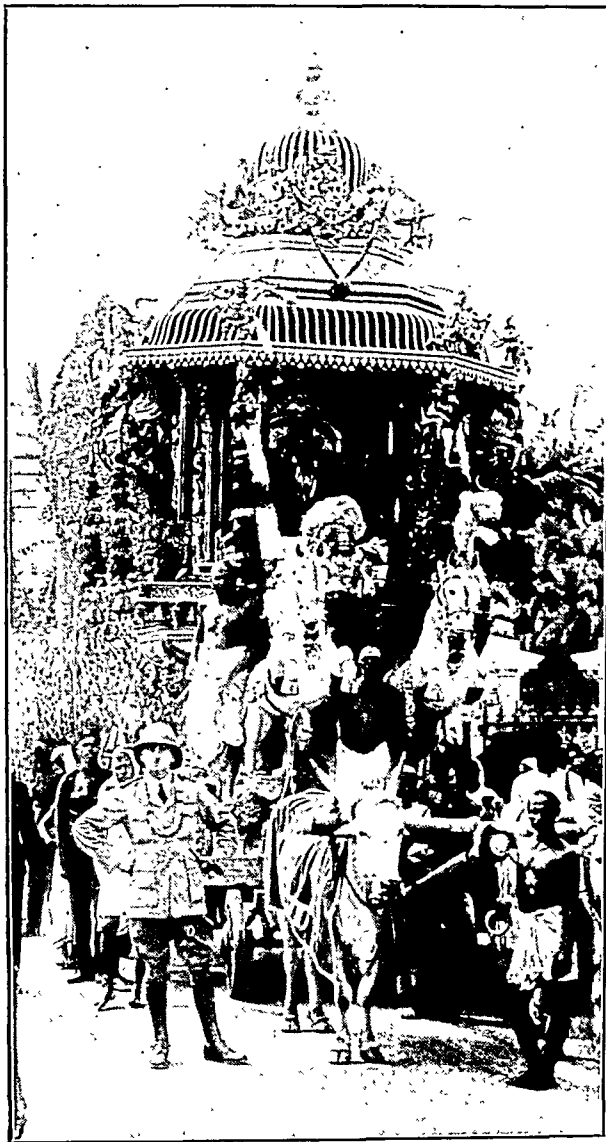
ture in the inheritance of land, we find a system of equal division among brothers and sisters. Lands have been subjected to this parcelling process for so many generations that it would be no matter for surprise to find a villager making a claim—and a genuine one—to some such extent as 5-367ths of half an acre.

In the result, a race of agriculturists has become nearly landless—with the exception of a comparatively few wealthy families; and except the learned and clerical professions for those who can afford them, there is no other opening for Sinhalese young men. It is only in recent years that attempts have been made to remedy this state of affairs, by the creation of co-operative credit societies to give assistance in land purchase and cultivation; and, along with this movement must go a bold policy of irrigation and development of the old rich lands now lying waste. This question is intimately connected with the problem of the general food supply of the island. With nearly 900,000 acres under rice, Ceylon normally imports in the neighbourhood of 400,000 tons of rice from India; and in 1919 a sharp reminder of the meaning of this dependence came to the country when, owing to a combination of various circumstances, largely arising out of the war, this stream of imports practically dried up. For months the people were in sight of actual starvation, and for nearly two years were subjected to a food control and a rationing system. At this time an attempt was made by Government, along with utilisation of private capital, to stimulate local food production: and the light railway to Trincomalee was sanctioned, to pass through the chosen district. The undertaking was not prosperous, and with the return of Indian supplies to normal, it has not been strongly pressed. But given the necessary irrigation policy, and bold measures to stamp out malaria, the greatest obstacle, the next few years may yet witness some interesting developments in the direction indicated.

Of the total population of Ceylon (5,000,000) some 9,000 are Europeans, more than 90 per cent. being British, mostly English, the majority of whom are in the plantations. Some 30,000 to 40,000 others are European in outlook, by birth or family tradition, and by training (to an increasing degree in Europe); the latter include all the Burghers, some Eurasians, and the educated Sinhalese and Tamils. The total "literate" population is given as 300,000.

The two main divisions of the population, as determined by the country's history, are Sinhalese and Tamils; the former are more than double the latter and number more than two-thirds of the population. The Burghers are of unique origin, the term "free Burgher" being used by the Dutch to denote the retired servants of their East India Company. Amid the confusions of later times, Dr. Copleston's account of them remains the truest, viz., "Few of these are now of unadmixed European descent, but most are of unblemished

and some of noble origin." They retained their status under the British occupation, and were of inestimable advantage to the new rulers, alike as a buffer and as a medium of contact between themselves and the people of the country. The result is apparent to-day, both in the striking individual examples of culture and in the general level of educational and social development to be seen in Colombo and other large towns, more especially



[Photo: Plâté, Ltd.]

SILVER JUGGERNAUT CAR IN INDIAN FESTIVAL, CEYLON.

when it is realised that that result has been achieved (obviously) without any leaven of English youth in the schools.

Scenery.

Having landed in Colombo, which is described elsewhere, it will not be long before the visitor is urged up country to see the 'show places' of the island. No previous description can mar by anticipation the view on the railway journey to Kandy, which has been described as among the most magnificent in the world. After some fifty miles of

rapid travelling through flat land, where a wide expanse of rice-fields in their variegated dress of green alternates in a regular rhythm with clumps of coconut, jak, and other shade (and food) trees, under which nestle the hamlets of happy villagers, the steep and sudden ascent of the pass begins. An additional locomotive, a diminished rate of speed, and a new beat in the song of the wheels testify to the stiffer gradient. The earth-cuttings that close in on the track grow more rugged, and one soon realises that they have changed to living rock, gaunt and dripping with moisture. Dark tunnels, through rock-masses that cannot be skirted, increase, and the intervals between them grow less. Then there bursts into vision the mighty panorama that has made the fame of this justly famous railway. Hung precariously in mid-air between a few thousand feet of crag above and a thousand feet drop below, the train skirts the scarp of the hills along a hewn-out shelf of rock, while cataracts thunder under vibrating viaducts, and every rock-born spring empties its gushing contents into the conduits that guide them to their fall. From our aerial lookout we gaze entranced at the glories spread out as far as the eye can see. The valley is laid in terraced rice-fields, gleaming like mirrors, or in their full gamut of green, the whole forming an amphitheatre with a tessellated floor which borrows a gem-like charm from distance. Homesteads, cattle, and men acquire miniature proportions, and the motor-road is revealed as a thin, white ribbon peeping out at intervals through the opulent vegetation. That is one scale, the scale of the infinitely little. We lift our eyes and the prodigious scale of the infinitely vast alike astounds and exalts the mind. Fold upon fold, the hills are massed together in a stupendous assemblage. The nearer forms wear familiar aspects, castellated, tabular, or biblioid; but as the masses melt into the blue haze, light plays upon them with its magic pencil, and a striking effect of colour enlivens the total beauty of the scene. Such is Kadugannawa, monument of the imagination and spirit of the engineers of a hundred years ago, who planned and wrought on a scale that must always be a stimulus to future effort, as it is matter for just pride in past achievement.

Keyed up to this high pitch it is not possible long to remain, and the milder charm of the approach to Kandy comes with a natural cadence; but soon further progress through the great central plateau, although it lies through districts 'made' by that industry which is the main pillar of Ceylon's prosperity, and, therefore, presenting less rugged aspects, yet affords a continuous feast for the eye as the train rounds the shoulders of the hills, and valley gives place to valley, gorge to gorge, and here a view of a waterfall or there a vista of the distant landscape, recurring with the successive and tortuous windings of the mounting track, make our 150-mile journey a tireless delight. As the rigour of the tropical sun abates,

and evening brings refreshment, the mountain breezes waft a breath of coolness which renews our capacity to receive the impressions of country that is a veritable revelation of earth's fairness.

Reviewing our impressions, we recall that leaving behind the coconut groves of the lowland landscapes, we had in an hour or two climbed from 500 to 1,600 feet, covering no more than 13 miles in the climb. We realise what an impregnable stronghold Kandy was in former times, when fever-haunted jungle barred the trackless approach to the pass. It was a true Sinhalese prophecy which said that the kingdom would be his who cut a road through the rock: the Dawson Pillar at Kadugannawa sets the seal to the inheritance. We saw Alagalla, the stately peak which towers a few thousand feet above the railway, and, across the valley, standing out from the mass, the castellated rock which was the last refuge of the local Robin Hood; also Bible Rock, with its inspiration to pious emotion. We marked the lone beauty of the talipot palm that rears once in fifty years a multiple plume, twenty feet in height to its hundred feet, and flowering dies. After the break at Kandy we resumed the tortuous climbing among nobler hills, the aspect of which is altered by cultivation or climate. There was found a resemblance to the Sussex Downs in these treeless grass-covered 'patanas,' which now began to fill the picture. Near Patipola (romantic country!) the 'summit level' at 6,226 ft. was reached, and the knowledge was gained that in the south-west monsoon the curious phenomenon of the 'rain-shed' is to be observed there, the train emerging through a tunnel from mist and storm into sunshine and a drier air in the lee of the range.

From Bandarawela, the former terminus of this railway, 150 miles from Colombo, begins the headlong descent to the smiling plains of Uva. On this route Ella affords one of the most wonderful sweeping views of undulating forest country, stretching down to the south-eastern coast.

We pass through historic ground in beautiful Badulla, with its fine amphitheatre of mountains and its grand waterfalls, now the centre of planting country. The country around here is notable chiefly for two things: one is a shrine of the greatest antiquity, sole relic of a time two and a half centuries ago when this spot was the most sacred of a dozen or more sacred localities in the island, and kings lavished upon it their pious gifts; the other is a vast restored irrigation tank to dam which the ancient Sinhalese engineers called into requisition, to eke out their own masonry, two masses of living rock, through which they clove two channels for their sluices.

It has been convenient to localise this account of the scenic beauty of the uplands, confining our going to the railway. But the splendid network of motor roads, though it diffuses the picture, affords now and then a joyous freedom which the railway traveller might envy, for a cascade of sublime loveliness, a frescoed cave-temple or the

hidden reaches of a river, or again a plantation bungalow ideally situated on a hill-top, may lure one out of the beaten track, while there are several notable passes and gaps to be visited from which the eye takes in at a single glance the drop to the sea, gleaming like a silver ribbon fifty miles away.

But we are now far afield. Leaving for later description Kandy and Nuwara Eliya, and merely mentioning Ratnapura, the city of gems, and Kurunegala with its stupendous rock-masses, the nomenclature of which links the surrounding country with the fate of the aboriginal queen and her people at the hands of the Gangetic Aryans, it



SINHALESE LADY OF HIGH RANK.

is time to return to the coast to view other features of the varied scenery, including for convenience things of interest which do not belong to that category. Here again the window of the railway train shall be our look-out. It is a hotter journey than the last, but almost throughout the 100-mile ride to Matara, in the south, we keep in sight and hearing of the open sea, and its breezes fan the languorous air. At a first view the endless plantations of coconut, that would otherwise have a fatiguing monotony, present a pleasing attraction in their 'long-drawn aisles with fretted roof,' through which the radiant sunlight is sifted on to an enamelled carpet of sward or to shining sand. League-long rollers curl and dash on the shore in a mass of hissing foam. An unbroken expanse of

sea, of the deepest blue, stretches to the sky-line, where the cloud-alps dazzle in the sun. As we proceed the wide strand gradually yields to a sterner coast, where fine natural pools are fed through the funnels of rock, or beautiful rock-bound bays invite the bather. Grand river-estuaries or sea-lagoons suggest romance as one catches a glimpse of thickly-wooded or mangrove-covered banks with Adam's Peak and range in the blue background.

There are other varied elements in the picture: the gleaming bellied sail of an outrigger canoe skimming the crest of the wave shoreward in a favouring breeze; in the offing a coral-fisher's dhow straight from the Middle Ages; the entire male population of a village hauling in with rhythmic chorus the great seine nets, while seagulls dart screaming upon their easy prey, and men wade into the water with agitated splashings; the same on a Sunday, playing village cricket under the coconuts, with a passion worthy of a prize-fight. Nor could we miss, as we pass, evidences of the manifold activities of the district, which embraces one of the principal rubber-planting areas, largely owned by the Sinhalese, the basket-making industry, the cabinet industry, tapping coconut trees for toddy and distilleries for the arrack obtained therefrom, fishing for crab, prawn, and oyster.

With the approach to the port of Galle we may close this section, referring the reader to the description, under their respective headings, of things to see in other parts of the country.

Kandy.

Kandy, the approach to which from the plains can, as already indicated, be scarcely equalled, is reputed to be one of the loveliest cities in the world. Set jewel-like in a verdant hollow, it wears diverse aspects of beauty that can never pall. A charming artificial lake lies at its heart. Bund and drive wind about with the contours of the richly-verdured hills that sweep down to the water's edge. Stately palms and beautiful shade-trees ring the picturesque pool. On the hill-sides commanding the water are pretty bungalows and gardens, and the carriage-drive is a vantage point for a general view of Kandy and its environs over the plush carpet of the tree-tops. Park and greensward heighten the illusion of a sylvan retreat, obscuring the manifold activities of an administrative capital, the clearing-house of the central planting district. Lanes invite to dalliance, while overhead a choir of birds of rainbow plumage sustains its day-long symphony. A forested eminence that flanks the town is roaded as a pleasure in which one might saunter at large and experience in security something of the mystery of a tropical forest, where giant trees hung with giant creepers stand waist-deep in a tangled undergrowth, impervious to sunlight, cool, restful; or recline at ease beside a jungle pool; or stand at an opportune clearing where the eye commands a wide view of remote ranges, opalescent in the sunshine, receding into blue distance.

Wandering farther afield, one finds one's way to a broad river (the longest in Ceylon), where elephants disport in the water or perform variety turns for the visitor's entertainment (and the mahout's profit).

Driving in another direction, past glades of rubber, one traverses a miniature canyon, where the same river dashes over a narrow bed of rock to broaden out in a wide reach dotted with tree-clad islets, while above on either hand virgin forest or tea-garden slopes steeply skyward. Near at hand, on the opposite bank, classified and set in ornamental grouping, interspersed with beautiful sweeps of undulating lawn, and traversed in circles, crescents, arcades, and long avenues, by a shining path, is that wonderful collection of tropical flora, the hundred-year-old Royal Botanic Gardens, famed as the finest of their kind.

Returning to the city, one has leisure to notice the quaint differences in the looks and garb and manner of the conservative hillmen from what had been observed in the plain-dwellers. Stolid villagers troop to market with the fruit of their fields or their artistry. White-robed women wend to temple worship on the days of the moon. Men of the drummer caste may be spied wearing a ritual garb with an effect that obscures their sex. Those are some of the types that catch the eye. Two features of native life in Kandy are there suggested, in their different planes: one is the central market-place, with its chattering hum, where a wealth of tropical fruits is displayed, and the other that lodestar of the entire Buddhist world, the Temple of the Tooth Relic.

Nor can we do more than enumerate here the appointments of western civilisation in this last retreat of Sinhalese national tradition and sentiment: the old churches and religious seminaries, great schools, palatial hotels, up-to-date clubs, well-equipped hospitals, municipal hall and cinema, fine sporting fields, shops of every class and category, handsome residences, a stately vice-regal palace in beautiful grounds—the *ensemble*, in short, that constitutes the equipment and amenities of an up-to-date city, to which travellers resort not merely for a transitory view, but for a longer or a shorter sojourn.

Nuwara Eliya.

But what of Nuwara Eliya, the unique mountain resort and sanatorium, with a climate and general aspect that recall nothing less than an English (or Scotch) village magically transported to the tropics? Having arrived overnight by the midget train that groaned and creaked up the thousand feet climb in the four short miles from the junction on the main line, as it twisted and doubled back among tea-bushes and the back-yards of the railway settlement, we wake up to a world made new. The languor of the lower climes is gone, and a new zest in living is felt. If we have known beauty before, what language can describe the scene that is now unfolded to our enraptured gaze! Scales have fallen from our eyes. We discern a

new mellowness that tones the hard contrasts of sunlit landscapes. The vegetation is less exuberant, and the loveliness of the individual tree finds more expression.

Match me the like of suave Nuwar' Eliya,
Hill-fenced, nestling 'mid the grassy vales
Of Lanka's wooded heights, where never fails

A gentle spring. Her balmy airs allure
The alien travellers from far and near.

A thousand ways reminiscence assails
The exile when 'neath garish suns he ails
For greyness, mist, and eager nipping air.
Of northern homeland. Here bracken, gorse, and
fir

Reclothe the landscape. Water-meads are
starr'd
With daisies; moss-cradled violets lurk obscure;
Forget-me-nots enamel all the sward.

Trout idly glance, slow cattle browse the leas.
—A thought of England in far Indian seas.

(L. A. ARNDT, in the *Ceylon Churchman*, 1921).

It is a happy cure for nostalgia, and full well is it availed of. When the heat of the plains grows less endurable at the equinoxes, the Colombo residents go to Nuwara Eliya, which strains its resources of hospitality (first-rate in themselves) to entertain the holiday crowd. Shows, races, gymkhanas, tournaments, and other festivities disturb its wonted peace, but they are a necessary adjunct alike of the routine of the Colombo workers and of the welfare of the settlement, to own house property in which is regarded as the ordinary desideratum of the wealthy of all races.

Those are not the best times, however, for the traveller to enjoy his stay at Nuwara Eliya. Its beauty and charm are savoured in quiet rambles through the woodlands or drives to less accessible spots, which must not be left unvisited. Fatigue is unknown as we tramp past the smooth-curved "patanas," with their pleasing alternation of grassland and forest, where the leopard lurks and the sambhur is hunted in season with hounds and knife. Inexhaustible is the entertainment Nature provides in this favoured retreat. Frosty skies with brilliant nights of stars; a tonic air; secluded paths in cooler shadow; wonderful gorges clothed with tree-fern or other undergrowth; a silvery trickle that takes the imagination a far journey to steaming plains where, grown to a mighty river, it moves in a majestic sweep to the ocean a hundred miles away; waterfalls sparkling in sunlight sifted through a roof of foliage; spray-born rainbows spanning the gullies; lofty eyries commanding the gorse-covered commons or the shining turf of the golf-courses, about which a well-stocked trout stream meanders lazily; many a coign of vantage for panoramic views of undulating country declining gently to the seaboard; a lake in a wilder setting than Kandy's, haunt of the angler for carp, lashed ever and anon to a mimic storm; passes and gaps where the plateau

falls dizzily away at one's feet; a short and easy climb through changing belts of vegetation to Ceylon's highest summit, Pedrotalagala, 8,300 feet above sea-level, where the map of the island is unrolled below; cottages with smoking chimneys (last touch of Home), smothered in a wealth of English flowers; orchards bearing English apples, plums, pears, strawberries, gooseberries, and peaches; gardens under cabbages, turnips, radishes, rhubarb and lettuce; clumps of fir and pine; rhododendrons moulded by the wind; and—to round off the interminable list—an English churchyard with an English village church!

A Royal Sport.

There are two outstanding national customs in Ceylon which any visitor may consider himself fortunate indeed to make acquaintance with, if chance takes him to the island at the opportune season or date. One is an annual event timed for the August moon; the other is rarer, occurring at longer or shorter intervals as the policy to preserve a noble wild species dictates.

The latter is a royal sport, the capture of wild elephants. Weeks, or perhaps months, before the date approximately fixed for the final event, the villagers, under a form of feudal service, with axe and gun and simple rigout, enter the forest upon their weary and dangerous task. A solitary pool, retaining a trickle of moisture while the surrounding country is dry, is selected for enclosure within a strong stockade, and towards it in dense forest the beaters work in a great cordon, driving the unseen herd before them with shouting and fires and the beat of many drums. Heroisms are a commonplace of the beaters' days and nights, and not seldom the hereditary chiefs share their peril, one old campaigner recently at the cost of his life. The expectant public is kept posted by the Press; and the Kraal Officer (a senior civil servant), in consultation with the native chief of the district commanding the kraal, fixes the date and hour of the final drive-in. That is the spectacular climax which draws the highest in the land, with many a distinguished visitor, to the town of palm-leaf and bamboo that has sprung up in the jungle. Grandstands are provided for the guests along the stockade of living forest giants, it may be, lashed together to take the shock of the charging beasts that will not tamely yield their native heritage of lordly freedom.

In a crescendo of thrills the day approaches. Closer and closer the cordon is drawn. The sense of hearing is still the only witness to the presence of the invisible monsters, as the ear detects a shriller note in the din, which tells of every nerve strained to avert a last-minute breakaway. Intervals of rest are interposed for the timing of the finale, the beaters' handy camp outfit is requisitioned, great camp-fires rear their heads to flout the sunshine, and a brief peace settles on the scene, until silently the fresh order to advance is communicated to the line, which reforms with

military precision, and the herd is driven yet nearer to the masked stockade gate. Suddenly, in ones and twos, followed by the mass of the herd, and with unwilling stragglers in the rear, the actors in the title rôle make their first appearance, and the Second Act of this living drama opens.

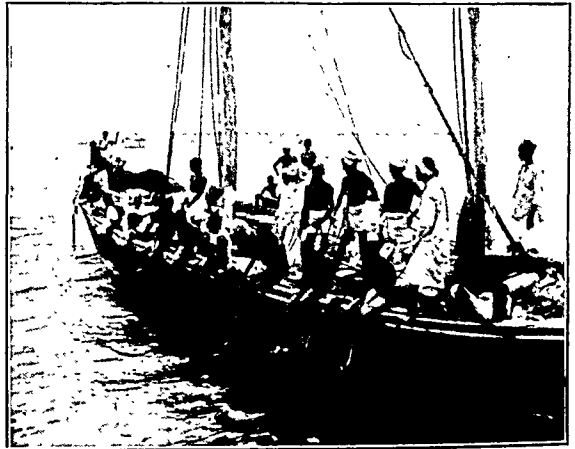
The thrill of expectation now gives place to a sense of impending climax, as the herd masses together within the pool in a last stand for dear liberty. The decoy elephants and noosers are let in. A grand beast, hero and favourite of past kraals and pageants, leads the charge, and the jungle comes down in great swathes. The air

with thrust spear-points. The decoys pursue their task unperturbed. Calm in their ascendancy over their wilder brethren, they co-operate with their masters in intelligent strategy, to impose their will upon them, and when the last prisoner for the day has been made fast, they march out in orderly file, conscious in bearing and dignity of a great day's sport.

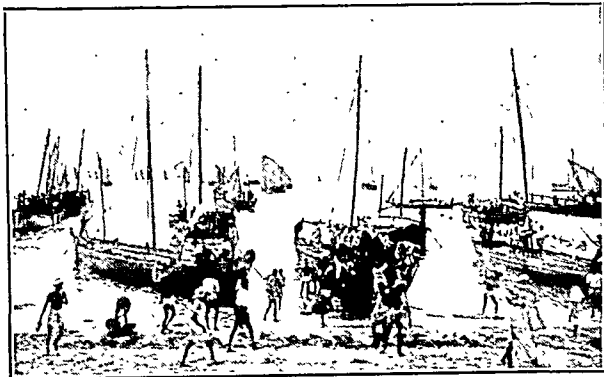
The leaping flames of the fires that have been lighted round the stockade play upon the gaunt, mysterious forms of the captives, still loudly protesting and straining with all the weight of their ponderous carcasses at the ropes that secure them.



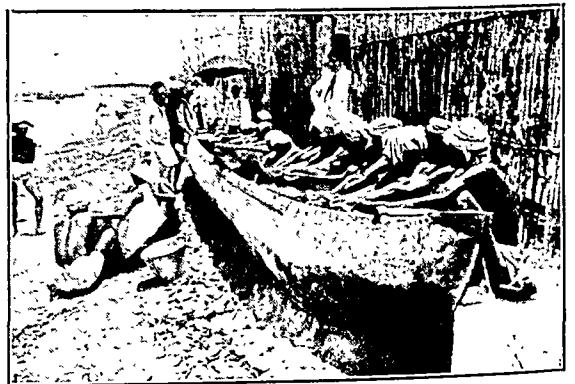
TYPICAL PEARL DIVERS.



KEELAKARAI DIVERS PREPARING TO DIVE.



BOATS OF THE PEARL DIVERS.



WASHING ROTTED OYSTERS.

[Photos: Plâté, Ltd.]

PEARL INDUSTRY OF CEYLON.

becomes tense with the danger and the excitement. And then pandemonium breaks loose. The earth quakes under the tramping and trumpeting of the infuriated leviathans. But, with more than human skill and tact, the decoys detach them one by one from the herd. Daring noosers are nimble to seize their opportunity; they slip off their mounts and the sure lasso tightens round a lifted hind-leg to the limit of deterrent pain, and one more royal captive yields up his liberty with a roar of baffled rage.

Desperate are the thunderous charges made by the rest of the herd upon the unyielding fence; madly they retreat from the flaming wall, prickly

The drama moves to its quiet close. The fate of the several prisoners (numbering from a score to a hundred) is determined, and the herd is divided, as the chiefs take their quota, and single units are sold and led away to profitable servitude under various humane and admiring masters, while others, perhaps, happy overplus exceeding the requisite or permitted catch, receive the freewill gift of restored liberty.

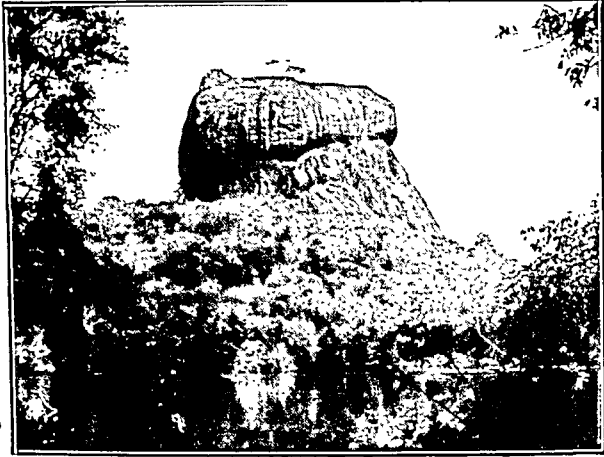
A Royal Pageant.

Grown docile with kind usage, some of the captive elephants will soon make another appearance on a different stage, viz., that of the Annual Pera-

hera (or Pageant) in Kandy, an historic custom with an origin shrouded in legend. However that may be, the ceremony, while it is but a pale reflection of the ancient pomp and circumstance of Sinhalese royal power, offers scope to the entire population of the district for a fortnight's carnival. Villages are deserted by the migrating crowds, who bivouac in the open spaces. Booths spring up in the vicinity of the Temple of the Tooth, the focal-point of all the ritual; secular carnival is empha-

beasts move in stately and unhurried progression. Tinsel and colour recall the magnificence of the past, when the wealth of the city was lavished on this central occasion of national festivity, and the trappings were of pure gold; kings then took part in it, riding in golden chariots drawn by spirited steeds.

The hereditary chiefs, superhuman in their proportions from the multiple swathings of their gorgeous national dress, attended by their satel-



THE ROCK OF SIGIRIYA.
An Ancient Sinhalese Fortress.

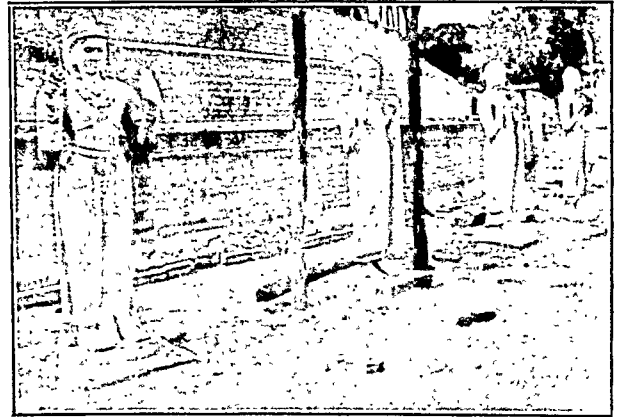


GAL VIHARE.

Rock Temple with recumbent figure of Buddha, 46 feet in length, cut from the rock. The figure, representing Buddha at his attainment of Nirvana, is the best executed specimen in Ceylon.



MIRISAVETIYA DAGOBA, ANURADHAPURA.



RESTORED STATUES AT RUANWELI
DAGOBA, ANURADHAPURA.

SOME OF THE ANCIENT RUINS OF CEYLON.

Although Ceylon is so close to India, and Buddhism originated in India, there are no Buddhist monuments in the peninsula so old as those of Ceylon, which date back to the third century B.C.

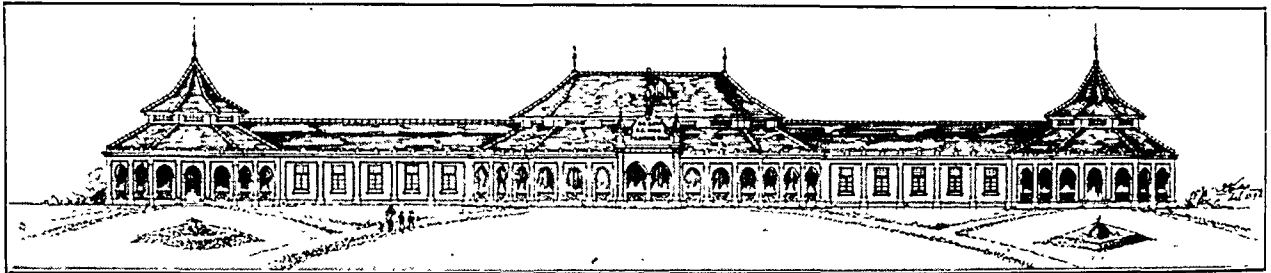
sised by numerous side-shows, which enjoy a paying popularity. Even the European hotels make capital of the occasion to arrange a special Peralahera programme centering round the moment when the pageant shall pass by.

The procession is so arranged that from day to day the bounds are wider and the hour altered until from being a midday event it falls at the popular hour of 9 p.m., when it becomes the greatest draw. With duly ordered precedence the elephants and the dignitaries of the different temples (Hindu among them) take their place in the line. Three and three the richly-caparisoned

lites, lead each section of the procession. Torchlight and beat of drum and the frenzied dancing to shrill pipes stun the mind into a feeling of unreality, until the stilt-walkers and ludicrous figures germane to carnival bring the necessary comic relief. Dense throngs are merged into the pageant, which assumes the aspect of an advancing victorious host. Every vantage-point on the route, whether boundary-wall or roof or tree, is packed with lookers-on of every degree and station. Nor is a dramatic climax wanting, for the very heart and core of the pageantry, the *pièce de résistance*, is awaited with a general thrill. A gun

is heard, and the leading actor, the elephant of the Temple of the Tooth, descends the temple steps after making ceremonial obeisance. It is worthy of its place at the centre of the spectacle. With the dignity of age and commanding stature, it steps out, the cynosure of every eye, bearing on its back a golden howdah containing what is probably the source and origin of the ceremonial, the venerated Relic. It sweeps the crowd along in its wake, and upon it the curtain may fall, for it would take too long to enumerate the rest of the ritual of a ceremony that never fails to attract visitor and resident alike, and has even been included in special programmes for the entertainment of Royal visitors.

modern writer: "As if by the waving of a magic wand temples, tanks, parks, gardens, public buildings, resting houses for man and beast, hospitals—also for man and beast—free almonries, schools and colleges for monks and nuns (once numbered in tens of thousands), gymnasiums and public halls were erected throughout the land. There was dazzling magnificence within the sacred city, which contained nine-storeyed houses; and the streets were crowded day and night by throngs of pilgrims and also traders from all parts of the then known world. The atmosphere was saturated with the fragrance of sweet-smelling flowers and delicate perfumes. Elephants, superbly caparisoned, and with gilded howdahs on their backs, and



PROPOSED PILGRIMS' REST AT ANURADHAPURA.

Buried Cities.

Nature has resumed her ancient régime in Anuradhapura, where once Ceylon's kings held sway for 1,250 years. Noble forest trees spread their shade over green park country, where every open space not built upon with the growth of the administrative capital of to-day carries some fallen relic of their magnificence or their liberal patronage of religion. The present population of the town is a meagre four thousand, while in the palmy days of the great capital it must have been numbered in hundreds of thousands. A Sinhalese writer, cited by Knighton in his *History of Ceylon*, has thus described the old city as it was about 1000 A.D., on the eve of its decline, and after it had, in fact, ceased to be the capital of the island: "This magnificent city is refulgent from the numerous temples and palaces, whose golden pinnacles glitter in the sky. Its streets are spanned by arches of pliant wood bearing flags of gold and silver, whilst vessels of the same metals containing flowers are observed on every side. In niches placed for the purpose are statues holding lamps. Elephants, horses, carts, and multitudes of people are ever to be seen passing and repassing. There are dancers, jugglers, and musicians of all kinds and of all nations, the latter performing on their chank shells ornamented with gold. The city is 16 miles in length from north to south, and the same in breadth from east to west. The principal streets are . . . all of which are of immense extent, some containing 11,000 houses; to enumerate the smaller would be impossible."

The outburst of the nation's vigorous youth, after the expulsion of a Dravidian usurper from South India in 237 B.C., is thus portrayed by a

chariots drawn by prancing steeds, paraded the wide ways of the city. The glittering spears, burnished helmets, and coats of iron of the cavalrymen, and foot-soldiers armed with bows and arrows, were seen in the thoroughfares, and the air reverberated with joyous shouts of "Sadhu! Sadhu!" (Hail, hail).

These accounts are corroborated by the celebrated Chinese traveller and monk, Fa Hien, who spent two years in Ceylon, about 413 A.D., and has left an account of the broad, straight streets of Anuradhapura, the beautiful public buildings, the mountain-like monuments, and the ceremonies at the exhibition of the Tooth Relic.

The archæological survey of the last fifty years has laid bare but the sketchy outline of the splendid capital, and that is the magnet which draws curious travellers from all parts of the world, not to speak of sociologists and antiquaries of more serious purpose.

A brief description of some of the things to be seen in this and other "buried cities" may be given here, the reader being referred for a more detailed and scientific account of these historic ruins to an extensive bibliography easily obtainable.

Fittingly placed at the centre is the Bo Tree (a species of ficus), one of the oldest trees in the world, grown from a slip of the sacred tree at Buddhagaya, in India, that was brought to Ceylon 2,200 years ago. It remains an object of veneration to many thousands of pilgrims, who crowd annually to the spot, and treasure the very fallen leaves of a symbolic tree that in itself presents no very striking appearance to the stranger; he would scarcely credit its great age, but that is authenti-

cated by the independent witness of Fa Hien, the traveller already referred to.

Nearly as old is the Brazen Palace, the "Terrestrial Sun," so called from its roof of brazen tiles. It was nine storeys high, and comprised 1,000 rooms. The vast central hall was lined with golden statues of lions and elephants, and at the far end stood an ivory throne, behind which were emblems of the sun, moon, and stars, in gold and silver and brass respectively. What remains to-day is only 1,600 gneiss monoliths, bare of ornament, marking a site 230 feet square.

Built by the same king, his *magnum opus*, which he did not live to complete, being borne out at his desire that he might feast his dying eyes on the gladdening sight, is the Ruanveli dagoba, or relic-house. Its exterior was coated with gold dust. Marred by modern restoration, it still has much interest for the visitor. In its vicinity are many Buddhas, a fine statue of the king, larger than life, altars, carved stones, inscriptions ten to twenty centuries old. Here may be seen the typical "moonstones" — half-moon slabs for doorway and stairfoot, richly carved in high or low relief—the griffin janitors (*makaras*) and the guardian *nagaradjas*—handsome figures of men canopied with hoods of many cobras—and, lastly, the merry elves (*ganas*), carved on step and capital.

Ruins of vast monasteries lie scattered over the park country, all built on a uniform plan (a quin-cunx), and surrounded by a profusion of ruined cisterns and ponds (notably a fine monolith cistern), until we come to the Thuparama, now restored to its ancient semblance, situated near to the site of the former Temple of the Tooth Relic. Almost virgin territory to the antiquary succeeds this area to northward, marked by one of the most striking features of the city, a towering brick spire surmounting a huge and lofty ruin known as the Jetavanarama.

Passing by more monasteries in various stages of decay and buried in thick jungle, we return to the central Bo Tree, to south of which we are shown the probable site of the tomb of Ehala, a Tamil usurper, which was the object of the chivalry of the Sinhalese king, who slew him in a terrific duel on elephant-back (the monsters sharing in the fight) and, setting up a rock pillar, inscribed upon it this decree: "Let no prince in future pass this way riding in palanquin or litter or with the beating of drums." Some ten centuries later, in British times, a fugitive Kandyan noble, fleeing from the consequences of an unsuccessful rebellion, and passing the same way, but uncertain of the exact site, alighted, worn out as he was, and solemnly walked some distance in scrupulous regard for a noble sentiment.

Mention must also be made of the hill of Mihintale, some eight miles away, and once probably the extremelimit of the city. This is sacred to Mahinda, the royal monk who first preached Buddhism in the island. Pious feet have worn away the surface of the thousand and more rock steps that lead to the summit. The ascent is lined with interesting

ruins of sculpture; the Naga Pokuna (Cobra Bath), a large hewn-out cistern with a carving of a great five-headed cobra, is the most notable.

The story of Polonnaruwa, the island's other great capital of former times, is mainly the story of Ceylon's greatest King, Parakrama Bahu the Great. The elder Bishop Copleston discerned in the epic quality of the ancient chronicler's story of his reign the same joyous feeling that prompted the ballad of "King Henry, the Hero of Navarre." In a similar happy comparison he says of this remarkable monarch: "It was given to him to unite the careers of a Julius and an Augustus. We have followed him to the point at which the greater Roman's career was cut short, and leave him prepared to inaugurate the Augustan Age of Lanka." That is comparing small things to great, but it is none the less a just estimate of a king who, from being heir to one of the many small principalities into which the kingdom was divided, not only achieved his ambition to unite the whole country under his sceptre, but even carried his victorious arms to Cambodia and South India, whose kings he compelled to pay tribute. He raised a new Anuradhapura in this city of Polonnaruwa, which now lies desolate.

To describe these ruins would savour of repetition, and mention need only be made of the palace, built like a mediæval castle, with thick walls, and a huge rock-temple with a sleeping Buddha. Prakrama Bahu had a lofty conception of kingship. There is a decree of his extant which runs: "In such a land as this not even the least drop of the water that the rain supplies should go to the ocean without bringing help to man; except places where the mines are, of gems and silver and such-like precious things, in every spot provision must be made for maintaining fields. Not to live for the people's good but merely to enjoy the good things that have come to our hand—such a life is utterly unfit for me!" That brings us to the most eloquent witness to a great past, namely, the vast irrigation systems of Prakrama Bahu and his predecessors. The whole of the northern plain, the ancient granary of Ceylon, is dotted with these tanks and canals, which remain the wonder of modern engineers. To describe one would be to describe all, so that it would suffice to mention the Kalawewa Tank, which is believed to be the Lake Megisba described by Pliny. This magnificent reservoir receives the drainage of 240 square miles of mountain country by three streams, which merge into a wide river. The sluices of the tank are 400 ft. above sea-level, and all the land as far as the sea was irrigated by it. The bund is $5\frac{1}{2}$ miles in length, and in places 65 ft. high; the base width is 250 ft. The area of the tank is 4,425 acres, and its contour 35 miles. Among the canals flowing out of it is the Yodi Ela, 60 miles in length. It was the pride of Sir William Gregory, a former Governor, to have this channel restored, as other irrigation works have been since. The twentieth century engineers made little alteration in the trace of nearly fifteen centuries ago. "This monument of

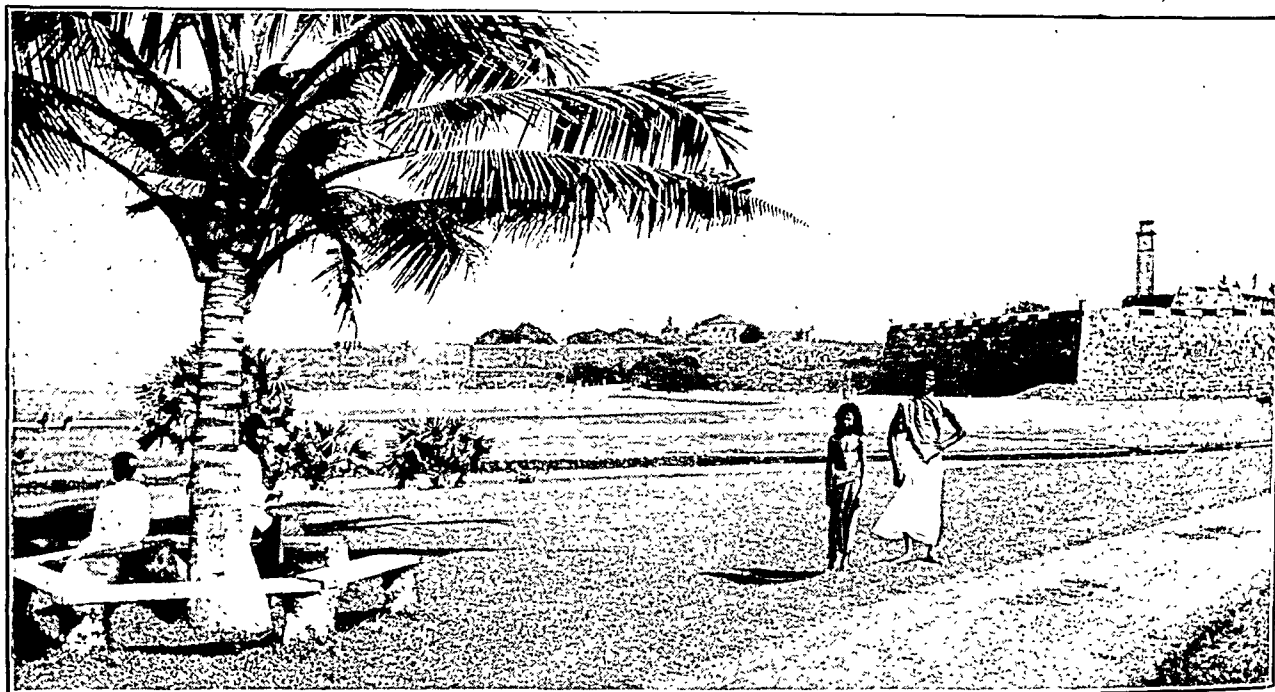
real kings " is the phrase used by Sir William in his gratification at seeing it restored.

We come now to Sigiriya, which must certainly be unique among engineering marvels. Here a patricide prince (479 A.D.), fleeing from a brother's vengeance, found this gigantic boulder of rock, 400 ft. high, and turned it into an impregnable citadel, protected by a moat. A spiral gallery ran round the upper part of the bulging mass, literally hung like a swallow's nest, and emerging at the only point, four feet wide, where there is no overhang. The aerial retreat towers solitary above a sea of forest, but was replete with all the appointments of a royal seat. To get from a lower platform to the upper citadel one walked right into the very jaws of a mighty lion, the claws of which alone are visible to-day, each a

Galle.

Under its full name of Point de Galle, this port was well-known to mariners of previous centuries. The present town has grown up on the rocky western arm of a big bay facing south-west, two miles wide at the entrance, and enclosing a wide sweep of water. The shores of the bay are fringed with coconut palms. Opposite to the town is a wooded cliff; and the whole aspect of the place, with hills in the distance stretching up to the great mountain range, is one of great beauty.

Galle has been a port from ancient times, and has even been (conjecturally) identified by Tennent with the Tarshish of Solomon. Its modern history begins with the Portuguese, who built a fort on the western rock, which was later replaced by the Dutch fort. The latter, in wonderfully good



ESPLANADE AND RAMPARTS, GALLE.

[Photo: Plâté, Ltd.]

man's height. The lower terraces and approaches were protected by a wall of a pink smoothness that remains a marvel to the present day. The surface of the rock was covered with spirited frescoes, traces of which remain where the hollows have protected them from the weather.

Other striking ruins are scattered about the country, notably in the south, showing how the Sinhalese kings were driven from pillar to post by the invading Tamils. Much yet remains to be explored. In one of these retreats was found, more than half-a-century ago, the Sinhalese metrical chronicle on palm-leaves, from which is derived most of our knowledge of the island's history, namely, the Mahawansa (Genealogy of the Great). The first part of it was the work of a Buddhist monk, who wrote back one thousand years to the conversion of the country to Buddhism. Other hands continued it down to 1815 A.D.

preservation, exists to-day, and encloses the official business and residential quarters. A fine V.O.C. (Dutch East India Company) coat of arms, dated 1668, is an interesting survival. The entrance to Galle harbour is extremely difficult for large steamers, being a narrow passage between sunken rocks. There is no artificial protection from the south-west; and, owing to the existence of shallow places, the amount of anchorage is small, considering the great expanse of the bay. It is, however, possible, if future trade conditions require it, that by blasting operations to remove dangerous rocks, and the building of a small breakwater, the available space may be much increased and the harbour used for the relief of congestion in Colombo. As it is, Galle exhibits signs of a trade revival after years of sleepiness. Steamers of the British India, Clan, and Asiatic lines call there regularly, and others at odd intervals. There is a fair and steady import trade in

rice and other foodstuffs, and the exports are low-country products, coconuts and their by-products, rubber, citronella-oil, etc. The fort, with its many old and perfectly preserved Dutch buildings, is quaint and picturesque, if unexciting. In its bazaars are to be found the best tortoise-shell and the best workmen in that art in Ceylon; and, as a piece of curious information, it may be mentioned that for two generations Galle has supplied, and still supplies, hereditary barbers to the P. and O. steamers; while the few enterprising emigrants among the lower classes of Sinhalese almost all hail from this town or district. The town is the headquarters of the Southern Province; and the Provincial head official called the Government Agent is the Chairman of its Municipality.

view of coral-gardens and the lace-work of the waves in a tiny bay at its base. Here are to be seen the ruins of a Buddhist-cum-Hindu temple, which, tradition says, once shone out to sea with its thousand statues and columns, bedecked with gold and gems; but the Portuguese despoiled it in the 16th century. Down the coast is lovely Tangalle, and, when we come to Hambantota, with its salt-pans, we are at the portals of the mighty forest which has many secrets yet to reveal, for it played its part in stirring events, hiding in its depths many a fine rocky citadel for fugitive princes and their armies or a retreat for contemplative monks.

There are interesting village activities to be seen in this district, such as the coir, lace, gemming,



[Photo: Plâté, Ltd.]

RAILWAY AT THE HORSE SHOE BEND, SCRUBB'S ESTATE, NANA OYA PASS.

While Galle has its own scenic and historic interest, with a fine prospect from Buona Vista, for example, and a beautiful riverscape at Wakwella, and the same social, educational, and sporting activities as we have seen in other towns, it is also the starting-point for interesting trips in the neighbourhood. The pretty town of Matara, the next and terminal station on the railway, is another Dutch relic, with forts in as good preservation as Galle's. According to Sinhalese tradition, Matara had once a great reputation for learning, and the memory of one poet is preserved. Then there is Dondra Head, the most southerly point, fronting the illimitable expanse of ocean, unbroken by any land until the South Polar Continent is reached. A fine lighthouse affords a grand prospect and a

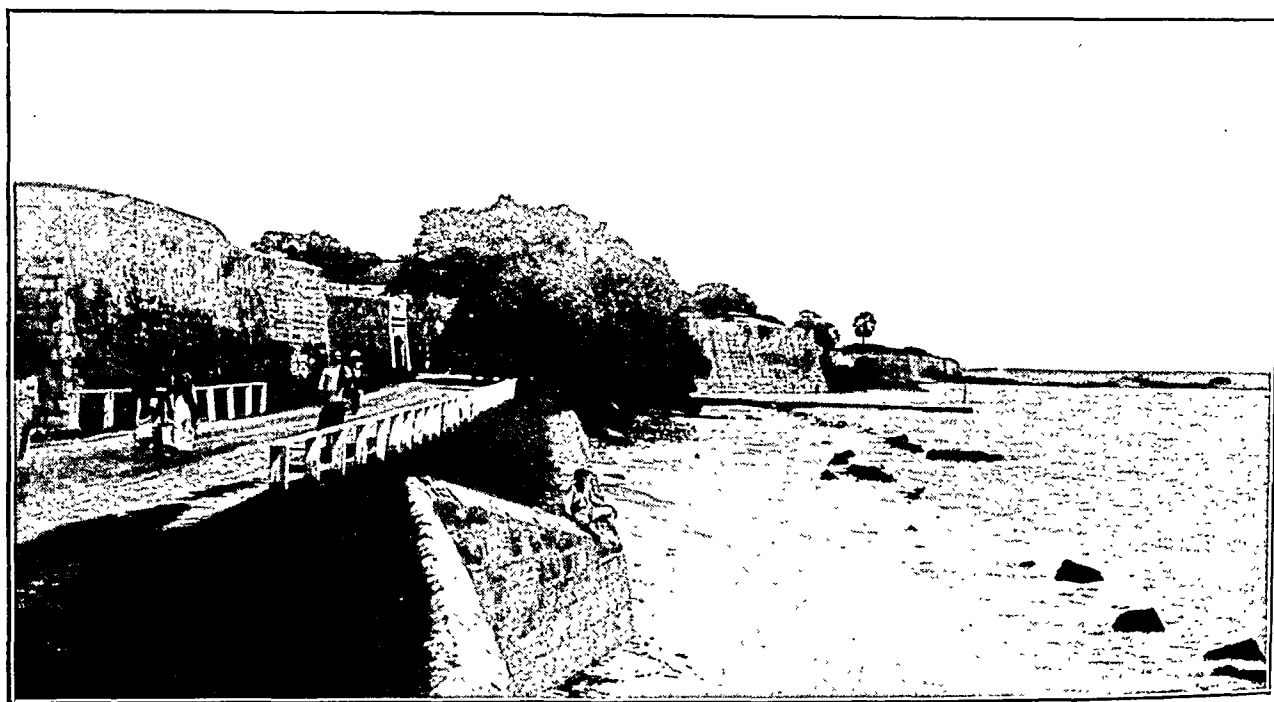
citronella-oil, arrack, and plumbago industries, and most notably the lacquer-work with the dye produced by the lac insect. There is much which it has been necessary to omit in our general survey of Ceylon, more especially that pertaining to unsophisticated village life, so interesting to the western visitor, but there would be leisure on these trips to look around. In prosperous villages, where food is plentiful and the struggle for existence unknown, the huts of coconut-leaf thatch and brick or mud-and-wattle walls have a trim appearance, though where there is distress it appears in the crazy and unkempt aspect of even these easily-rigged dwellings. In the sprucely-kept front-yards, swept bone-clean and hard, under the dense shade of clumps of plantain (as the banana is

called in Ceylon), or bread-fruit, jak, or other food-tree, for every one of the commoner fruit-trees is represented in the poorest gardens, the domestic activities of the women may be espied, from the bent and tottering crone to the little three-year-old set to tend her infant successors or, perhaps, to fetch fire from a neighbour's in the form of a blazing torch of cocconut leaves or a smouldering fragment of cocconut shell cradled in the husk of the same. There would be the grain to dry or the fish or lime-fruit to pickle; or the herbs and tubers to sort for the decoction prescribed by the "vederala," according to the old stanzas memorised in oral tradition; or there would be the rhythmic toil of one or two or three pairs of arms to pound the rice with long pole-like pestles in a tall mortar hollowed out of a log of

sweetmeat equal to any in delicacy and flavour, though the stranger is warned off the common market product. Meanwhile, the menfolk, the season of labour in the fields being past, and the crops garnered, and no Government or private works affording employment, dawdle through the day, idle and ripe for mischief, swayed by every wind of rumour as is the way of the peasant all the world over.

Trincomalee

Situated in the middle of the east coast of the island, Trincomalee possesses one of the finest natural harbours in the whole world. It is practically land-locked, is of great natural beauty, and is said to be capable of accommodating the largest naval force ever remotely likely to be concentrated there.



[Photo: Plâté, Ltd.]

VIEW FROM FLAGSTAFF, FORT FREDERICK,
LOOKING TOWARDS DUTCH BAY, TRINCOMALEE.

wood, for the leavened cakes, called "hoppers," which constitute the universal "cereals-and-yeast" of a Ceylon breakfast, and when daintily prepared in the home make a toothsome morsel. Again, there is the *al fresco* bathing in parties (mark of modesty) at a well or running stream, the water being swilled over the body in cool cascades from a gurgling earthenware pot. On festal days the great tomtom, a yard in diameter, will be brought out and heated over a fire of coals for greater tautness, and on it a dozen twinkling hands of laughing women (aged virtuosos among them) will beat out well-remembered melodies with a tireless abandon. Then there is the preparation of cup-sugar from the toddy of the cocconut or *kitul* palm; the latter yields the sweeter product, the best Kandy "jaggery," cleanly prepared by known specialists, being a universally popular

At one time "Trinco" was the headquarters of the East Indies squadron, and is still an important station, for gunnery practice is regularly carried out there, and the Admiral commanding has a local official residence. Its naval importance dates from the first landing there of the Dutch: and a military and naval station it has remained since with (fittingly) another claim to fame as the birthplace of the late Lord Fisher.

Commercially Trincomalee has so far an unimpressive history. It is situated in the "dry zone." The coastal fringe is cultivated with coconuts, but the hinterland has been forest and jungle for hundreds of years. With the completion of the railway connecting Colombo with Trincomalee and the hoped-for development of the surrounding districts, as well as the exploitation of the very valuable timber forests, there is some prospect

that Trincomalee will assume real commercial importance in the future: and it is possible that, as a port of transshipment for South Indian goods it may to some extent relieve Colombo. Its naval importance it can never lose. There is, in fact, a serious body of opinion which holds that Trincomalee is preferable strategically to the naval base of Singapore.

We are on romantic ground, for Trincomalee has echoed with the thunders of the big wars of Napoleon's day, and many a fighting frigate refitted then in her land-locked waters. Here was the gateway by which Portuguese, Dutch, and British in turn had access to the Sinhalese kings at Kandy, and down this highway their armies marched.

The romantic interest of the country, with its iron coast, is clinched by the demarcation of the railway now running to Trincomalee (China Bay) from Maho on the Anuradhapura line, and the twin-line that branches off to Batticaloa. This area once comprised the granary of ancient Ceylon, and the trace runs past the wonderful irrigation tanks and channels and the interesting temples and dagobas with stupendous Buddha images, melancholy witness, all, to the existence in a by-gone day of a vast population of artificers and labourers, and gigantic cultivation schemes. Near Trincomalee, again, is the "White Man's Tree," with a stone (placed in 1893) to inform the passer-by that here Robert Knox was captured by the Sinhalese in 1659. He spent twenty years in exile

in Ceylon (his father sharing the first year till death brought him his reprieve), and on his return to England he published his celebrated "Historical Relation," which is an interesting and valuable account of the Sinhalese generally and the Kandyan Court in particular.

Thus the gulf is bridged between the old Ceylon and the new: for it is in this region more than anywhere else that a new chapter lies ready to be opened. Ceylon is an agricultural country, and the call is to her sons to throw open again to cultivation vast tracts that once were smiling rice-fields, but are now for the most part (though the exceptions are notable) given over to jungle and wild animals, and the homes of men are poor and few and far between. Capital is wanted, and enterprise; likewise a determination to employ all known means (and discover new ones) to exterminate the mosquito, which holds up the march of progress in this outlying district of an otherwise prosperous island. A certain measure of sacrifice is inevitable, and a stopping of the ears to the siren-lure of the big towns, where careers are for the few and the unsuccessful are a drag and a deadweight. The writing of this new chapter, the restoration of Ceylon's ancient granary, which would be symbolical of a revival within practical limits, of some of the national arts, e.g., architecture, will be watched with real interest by the friends of Ceylon, both at home and abroad, and they are many.

COLOMBO.

The Port.

If Anuradhapura is the sacred city of Ceylon, and Kandy the home of its "national sentiment of modern history," Colombo is the centre of its commerce, culture, and wealth, and a principal source of its imperial importance. Situated on the great ocean routes between England and Australia, Farther India, and China, and at convenient coaling distance from Aden, Durban, Calcutta, Singapore, and Fremantle, its rise to greatness was inevitable once Galle, at the south-west corner of the island, and with a slight advantage over Colombo in actual position, was abandoned by the P. and O. Company as the port of call for its steamers. The reasons for the change were twofold: Colombo could more easily and cheaply be converted to a first-class harbour suitable for great steamers, and it was the natural coast terminus for the mountain railway which carries Ceylon's leading products to the sea. Galle is far more distant from Kandy, and the nature of the country vetoed any idea of a railway from Kandy to Galle. As a modern harbour Colombo is only about forty years old, though the Portuguese, Dutch, and English, always made it their capital. It was originally a small roadstead formed by a curve of the coast south of the Kelani River, with slight protection to the west afforded by a short line of rock jutting

out northwards. Here were two or three small jetties at which people and goods were landed by small boats, often in heavy and dangerous seas. A comparison of this primitive affair with Colombo harbour to-day shows the amazing progress made in a short time. Three breakwaters—one to the south-west, one "island breakwater" on the north, and one jutting out from the north-eastern shore—now enclose an area of over a square mile, forming one of the largest artificial harbours in the world, and affording accommodation for nearly forty large steamers, besides small sailing craft.

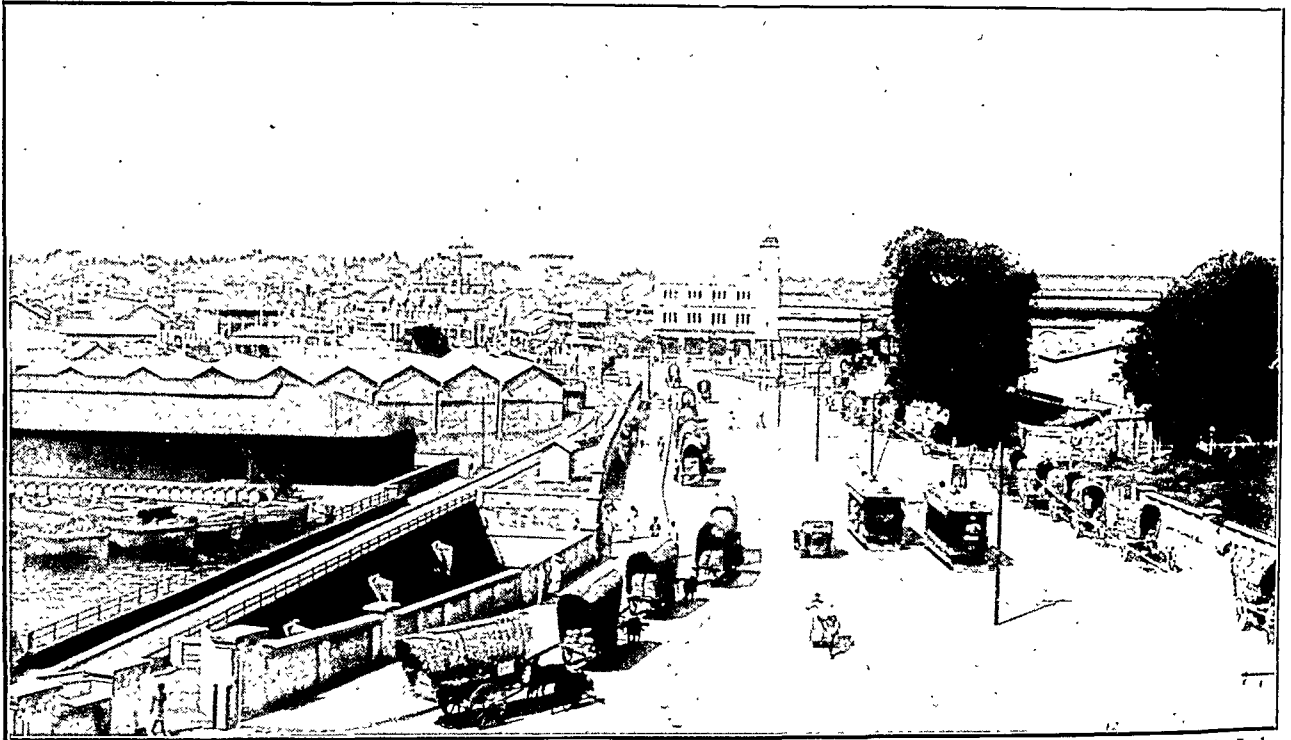
An extra arm was recently thrown out seawards from the south-west breakwater to mitigate the violence of the monsoon seas. Even now, at the height of the two monsoons, the sea within the harbour is choppy, though not dangerous, and on rare occasions of heavy storm, when ships are known to break adrift from their moorings, vessels have to lie outside until the weather abates. The harbour is kept continually dredged to such a depth as to provide water for any ship passing through the Suez Canal; and the stately post-war vessels of the P. and O. and Orient lines, big Cunarders, and Canadian Pacific liners, Dutch and French mail steamers, and battle cruisers, are familiar sights. With the exception of the jetty provided for oiling purposes, there are no along-

side berths in Colombo; ships are moored stem and stern to anchored buoys, and the mode of loading and discharging is by lighters brought alongside.

Passengers are carried to and from the shore in steam and motor launches, of which there is a cheap and efficient service: and small rowing boats are available day and night.

In pre-war days every large passenger steamer was surrounded on arrival by a fleet of these small boats, bringing jewellers, trick divers, fruit-sellers, dhobies, and a host of others to amuse—and fleece—the passengers. In the interests of health, order, and the safety of passengers' belongings, this traffic is now stopped; and, while passengers may miss an amusement which tided

A notable occasion was the arrival, late in 1914, of the first great contingent of Australians, on their way to Egypt and the Dardanelles, with their attendant escorts. On that occasion every berth was occupied, and more than twenty vessels rode at anchor outside waiting their turn to enter for coal and provisions. Viewed from the commanding height of the Grand Oriental Hotel roof garden, this Armada of huge liners, with warships of four allied nations, presented a noble and thrilling spectacle. The names Melbourne and Sydney, given to two of the landing jetties, recall the fact that here were landed the wounded British and Germans from the sea fight in which the *Emden* was destroyed. Other instances of congestion oc-



[Photo: Plâté, Ltd.]

MAIN STREET, COLOMBO.

over the period of waiting for landing or sailing, the new regulation is undoubtedly in the best interests of everybody concerned, except of those deprived of a valuable source of revenue.

The absence of wet docks or of alongside berths would appear at first sight to be a serious disadvantage, both as to time and cost. But, of course, lighters can be worked on both sides of the ship, and vessels are coaled at Colombo as rapidly as anywhere else in the East. From time to time the possibilities of providing alongside facilities have been seriously examined by the Port Authority. There is no doubt that this, and the connected question of increasing the actual ship accommodation of the port, are matters which will engage more and more attention. Accommodation is at present sufficient to cope with normal traffic, given no undue congestion from extraneous causes, such as strikes. But there have been such periods of congestion.

curred when, from reports of enemy raiders in the Indian ocean, or the discovery (through the sinking of two large steamers within sight of the port) of a German minefield in the immediate vicinity, shipping was held up by Admiralty orders.

An emergency amounting to crisis arose quite recently when, by a strike of harbour labour, affecting nearly 15,000 men, the trade of the port was temporarily brought to a standstill. In such a case vessels can be diverted to Galle and elsewhere; but in war-time this course is scarcely practicable, Galle being undefended.

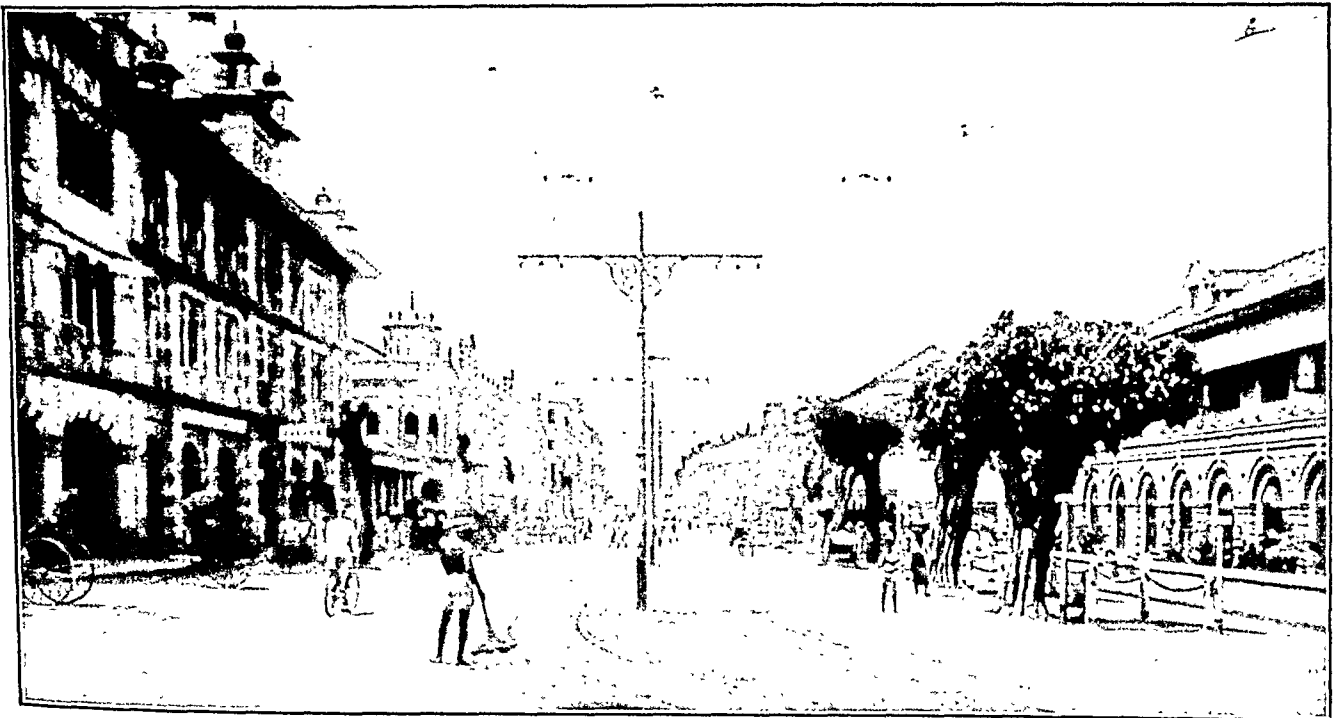
Leaving aside such abnormal occurrences, it seems clear that in the future this problem of accommodation will become pressing. Colombo must be regarded in this connection, not from the point of view of the import and export trade of Ceylon, or of the transshipment of South-Indian cargoes, though these aspects are important, but

as a fuelling and provisioning port of world-wide significance. In 1922 in the figures of tonnage of steamers entered and cleared, it stood third in the British Empire, and eighth in the world.

Ocean traffic through these waters is increasing: Colombo has not suffered from the opening of the Panama Canal, and it will become more, and not less, important as time goes on. Its possibilities of expansion are limited. Any attempt on the western or seaward side would simply mean an entirely new artificial harbour, without any natural rocks to start from. The huge mass of sand discharged by the Kelani River, and the existence of the sandy bar at its mouth, render highly uncertain the utility of any effort to make use either of the river itself, or of the shallow

ency. In these circumstances attention to-day is mostly concentrated on quick handling and despatch. Greatly increased provision of warehouses and jetties, more and larger cargo lighters, adequate and regular labour, wharfside cranes, ample and quickly moved coal supplies, railway facilities, including, besides sidings, a track all round the harbour with a through connection from each end to the main line, and, finally, a large and modern oil installation at Kolonnawa, in East Colombo, are among the means adopted to the end mentioned.

Situated at some distance from the harbour, and screened from the sea by low hills, the oil installation, under the control of the Port Authority, has large storage for petrol, kerosine, and



[Photo: Plâté, Ltd.]

YORK STREET, LOOKING TOWARDS THE HARBOUR, COLOMBO.

water space between its mouth and the north-eastern breakwater.

There is a large swampy area eastward of the harbour which has been suggested as a possible site for a wet dock. But, besides the excavation of the area itself, a long passage would have to be hewn through a low rocky hill, at a very heavy cost.

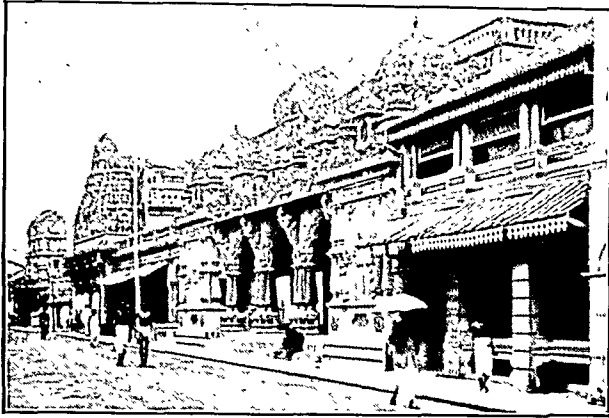
Finally, south of the harbour and near to it, in the centre of Colombo, is a lake or "lagoon," at present separated from the harbour area by a short canal used by cargo lighters. The utilisation of this area would again be a very costly matter; at present, by constant dredging, a few channels are kept open for lighters to a depth of about six feet. The land between this lake and the harbour, comprising much of old Colombo, is largely reclaimed: it is naturally subject to a tendency towards subsidence, and the construction of a ship canal would greatly accentuate this tend-

liquid fuel. Pipe-lines are provided direct to harbour to pump oil to and from steamers, and there is a rail connection.

An interesting feature of the warehousing facilities of the port is found in the two large sets of grain stores, used at present exclusively for rice, known as the Chalmers Granaries and the Manning Market. Built originally on ratproof lines in connection with a successful campaign for the control of plague in Colombo, these stores proved of the utmost value during the food scarcity in 1919. Within them were stored the reserves of rice, and from them were issued the weekly allotments for all districts of the island. They have a total storage capacity of upwards of 60,000 tons, and are held to be the best grain warehouses in the East.

As to further means of dealing with ocean traffic, recent indications seem to point to the development of Galle and Trincomalee, to

which reference has already been made. The control of Colombo harbour is vested in a body called the Port Commission, a Government department composed partly of officials connected with the port, and partly of unofficial business men. The Chief Collector of Customs is ex-officio Chairman, and the two executive officers are the Harbour En-



[Photo: Plâté, Ltd.]

HINDU TEMPLE, COLOMBO.

gineer and the Master Attendant, or Harbour Master. The latter official is responsible for the safe berthing and despatch of vessels, and for the control of harbour traffic, and is head of the Port Commission and pilot service. He has also magisterial jurisdiction over the harbour area.

The Harbour Engineer, besides the superintending of all these works, controls the dry dock (situated at the north-east corner, and capable of taking the largest vessels normally using the port) and the oil installation. Pilotage is compulsory: and pilotage fees, entering dues, mooring rents, cargo dues, and fees for various services, constitute the port revenue. The expenditure, after

who sees his passport, the Port Surgeon, who occasionally glances at him, and the Customs officials who pass his baggage on arrival ashore. And, in general, he will be impressed by the courtesy and speed with which they do their business. His launch journey from the ship will not take more than ten minutes, and within an hour of his vessel coming to its moorings he should be walking from the passenger jetty to the G.O.H. for his cocktail.

The Fort.

Although the page of Colombo's more recent history is crowded with events, no external memorials have survived the successive tides of change that have swept over the city. Named for its good roadstead by the Moors in the 13th century, Colombo has changed, and still changes, with every decade. Once a circumvallated fort, and part still bearing that appellation, it carries no traces of the former fortifications, except perhaps the sketchy remains of an old Dutch wall. Where once the principal ship canal flowed past warehouses on the water's edge, runs now the fine

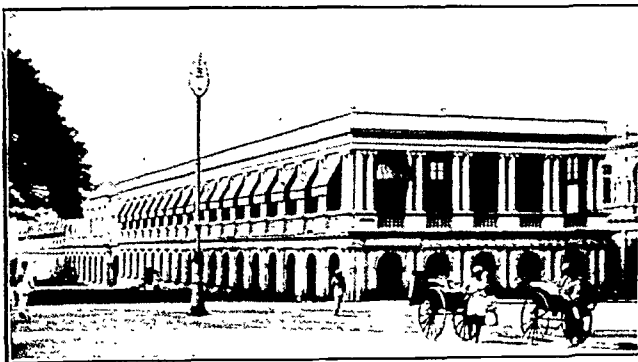


[Photo: Plâté, Ltd.]

SINHALESE WOMEN POUNDING RICE.

broad thoroughfare into which one steps from the landing-pier; the residence of the Dutch Governors, fronting the harbour, is now St. Peter's Church; the old Dutch cemetery is the Gordon Gardens, commemorating a distinguished Governor, to which has recently been transferred from another site a Jubilee Statue of Queen Victoria enthroned, and at the top end of which, teeming with memories but soon to be replaced by a more modern edifice in the best residential quarter, stands Queen's House, the residence of the Governor.

Far from carrying traces of its diverse history, the Fort wears quite an English air, with its great blocks of handsome or even imposing buildings, whether hotels or banks, shops or business offices. The wide streets are flanked by pavements or arcades, which carry a foot traffic not specially typical of Ceylon, but approximating to the general type of the cosmopolitan emporiums of the East, and a visitor in search of local colour may experience a feeling of disappointment. His local colour may on occasions be limited to a group of gaping country-folk on holiday, looking lost amid



Secretariat Building, containing the
Legislative Council Chambers, Colombo.

examination by the Port Commission, is incorporated in the annual colonial Budget, and requires the sanction of the legislature. Big capital expenditure has been met by means of loans under Government guarantee, and the excess of revenue over expenditure is applied in interest and debt reduction.

The visitor's contact with all this officialdom will be limited to his dealings with the policeman

the bewildering strangeness of the big city. Even the apparel of the Moorish pedlar of curiosities and precious stones (or coloured glass) is western as to jacket, pince-nez, watch-chain, and brogues, and he can converse with equal fluency in English and French. Nor do the smaller tobaccoists' and curio shops fall short of the standard of their English (and, it may be, Ceylonese) neighbours, while the high-class Moorish jewellers or the Bombay silk merchants make a brave and even alluring show.

Cool tea-rooms and the arcades referred to are a boon to the voyager ashore for only a few hours of the sunniest part of the day, affording a retreat from the bustle of a city busied about a more than empire-wide commerce.

But not commerce alone, for the city is only one part commercial, and political, academic, and social Colombo may meet the stroller's eye as he loafs and culls impressions. A compendious opportunity to realise the comity of races that is Colombo's boast would be a glimpse (if chance so



[Photo: Plâté, Ltd.]

SINHALESE LACE MAKERS.

favour) of the ceremonial opening of the Legislative Council, when the representatives of the different provincial and communal electorates in their varying garb of ceremony create an effect of pomp and colour not easily to be matched in a working day.

We have had in mind, so far, the voyager who saunters along the pavements with an eye on his watch, alert not to miss his boat. Not thus is Colombo to be savoured. It is incomplete impressions derived in such fashion that find their way through an indiscriminating publisher to an untravelled public. Nor are licensed native guide and astute gharry-driver, nor even the ricksha-puller, nimble-minded as he is nimble-footed, to be trusted to leave the visitor as fully stocked with the most correct and pleasurable impressions of one of the healthiest and happiest towns in the East, as they are likely themselves to be with the rupees of their guests of a day! A hurried run through a residential quarter, a progress through noise and smells to a Hindu temple or two, another to a Buddhist temple, pursued at various

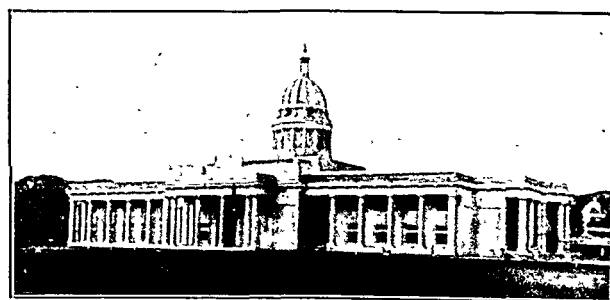
points by piratical urchins, clamouring for the price of desistance (and of a posy of wild flowers), it may be even a run to Mount Lavinia (which is no mountain) through the dustiest and most "bus-ridden" of the arterial roads—that is what falls to the lot of most callers at Colombo to the detriment of the city's good name.



[Photo: Plâté, Ltd.]

GENERAL POST OFFICE, COLOMBO.

We hope to present in these pages a truer picture of Colombo, suggesting an itinerary that will afford the maximum of delight. The north gate of Queen's House shall be our stand for a first comprehensive view of the central part of the Fort. We take up our position, under the eyes of the Sikh sentries, at the foot of a bronze statue of Sir Edward Barnes, Governor, road-maker, and coffee pioneer (1820-1831). At its erection seventeen years after the close of his régime, this memorial received touching marks of reverence from the common people, and it had to be railed off when homage developed into worship, and offerings began to be placed at its base.



[Photo: Plâté, Ltd.]

NEW TOWN HALL, COLOMBO.

Looking to the left, we see the block of Government buildings occupied by the Secretariat, including the Council Hall, but this, too, is shortly to be transferred to a grander habitation on a site among the best outside the Fort. Before us, to the right, is the General Post Office, an imposing pile of ambitious architecture. Colombo's "skyscrapers" draw the eye, dwarfing the lighthouse-cum-clock tower "standing where it ought not,"

in the centre of the vortex of motor traffic, a palpable obstruction. Our coign of vantage affords glimpses of several large English shops and bank buildings, while looking southward is seen in a vanishing perspective the road that will soon take us down the celebrated Galle Face esplanade. We shall pass on the way the Echelon Barracks, where the remarkably efficient Ceylonese volunteer garrison, successor to former regimental garrisons, is worthily housed, together with a company each of Royal Garrison Artillery and Royal Engineers.

Galle Face.

First place in any list of things to see in Colombo will always belong to the local Plymouth Hoe, as beautiful Galle Face has been called. A

exercising the minds of an ambitious Municipality), he regretted that the hope of any extension of this fine marine drive had been rendered vain by the prior mistake of those who had constructed the south-coast railway on the very edge of the shore; to-day one of the earliest acts of the representative Legislative Council, which has fledged out with enlarged powers, is to prognosticate a vote of 30 million rupees for the diversion of the railway farther inland!

With a glance in salute for the Victory Column and its Roll of Honour, and an ear for the information that near here, on the crest of the undulating ground, is the site of the projected New Cathedral, we move on past the Colombo Club, once the only



[Photo: Plâté, Ltd.]

CHETTY STREET, COLOMBO.

mile of undulating turf stretches away to vanishing point, bounded on the right by ocean and sky and on the left (partly) by a lake, the beauty of which, after many vicissitudes, has at last been worthily retrieved by canalisation. An upper road carries the motor traffic southward, while below a marine drive and promenade, swept by the salt spray, constitute the principal attraction. At the hottest noontide hour at which it may be the visitor's lot to pass by, when the shimmering heat creates an effect of mirage, and the ricksha-pullers in the distance appear to splash through the heat-haze, little imagination is needed to conjure up the glamour of the scene by moonlight, or its soft charm at sunset or dawn.

It may be of interest to note that when Sir Patrick Geddes was invited some years ago to report on the replanning of Colombo (which is ex-

social club, and, therefore, rich in memories of the "old days" when the race-course was located here, and here were held all the tamashas of a more leisurely time. Here, too, came world-famous singers and other entertainers for the delectation of the earlier exiles.

We catch an early glimpse of a cricket-field, first of many more that constitute a gladdening feature of Colombo landscapes, and contribute not a little to their charm, likewise a church spire, and so we come at last to the Galle Face Hotel, fronting the esplanade with a wing on the seashore.

Mount Lavinia.

We need not follow the route right up to Mount Lavinia. The wide Colpetty Road, with its fine bungalows, fronting or bordering the sea, carries on adequately for some miles, few parts of it

being lacking in charm, as we pass by large mansions or lowlier cottages, or even some quaint and typical native boutiques, each standing in its own densely-shaded grounds; but it fails to fulfil its early promise, and, when we reach the limit of the Municipality at Wellawatte, six miles from the Fort, "wild" buses and lumbering carts begin to make our going a discomfort. It may be true in a sense that Colombo actually extends as far as Mount Lavinia, but we have no need to anticipate the natural growth of Municipal activities, and, wiser than most guides, we recommend that this Mecca of the passenger be visited by railway instead. The suburban service is a liberal one, and a quick and comfortable run there and back (so it be between the times when the city offices fill up with or empty again their workers) can be included

all combining to convey an impression of good status and seemly affluence; but there is one point to be preferred above all others for the symbolism of the entry. That is Turret Road, giving access to Flower Road where, a flaming canopy of gold mohurs, or flamboyants, sifts the sunlight into rays of emerald and vermillion, and we make our further progress through a blaze of glory into the famous Cinnamon Gardens. Here we find ourselves in a labyrinth of red lanes with a continuous wall of foliage, pranked with gorgeous flowers, over which peep the red tiles and the gleaming stucco of the mansions where the plutocratic Burghers, Sinhalese, or Tamils lord it in style.

But Nature triumphs over gilded pomp, and the salient impression of the Cinnamon Gardens is what part of the name implies. The cinnamon



QUEEN'S STREET, COLOMBO.

[Photo: Plâté, Ltd.]

in the briefest itinerary. Fish-tiffins, sea-bathing, tennis, and tea on the seaward lawn amid the antics of thieving crows, constitute the ordinary programme, sometimes drawn out into evening dances and nights in the surf of the lovely bay. Wider sympathies may dictate the inclusion of a visit to the big S.P.G. College of St. Thomas, situated within sight, an old foundation harking back to the first Bishop of Colombo, whose legitimate boast was the transplanting under an Eastern sky of the institutions and traditions of the English public school.

Cinnamon Gardens.

Returning to the Colpetty Road, there are many points lower down its extension to southward at which we might profitably strike inland into the vast residential area, where is seen an endless succession of sunny bungalows and smiling gardens in contrasting shade, flanking well laid-out roads,

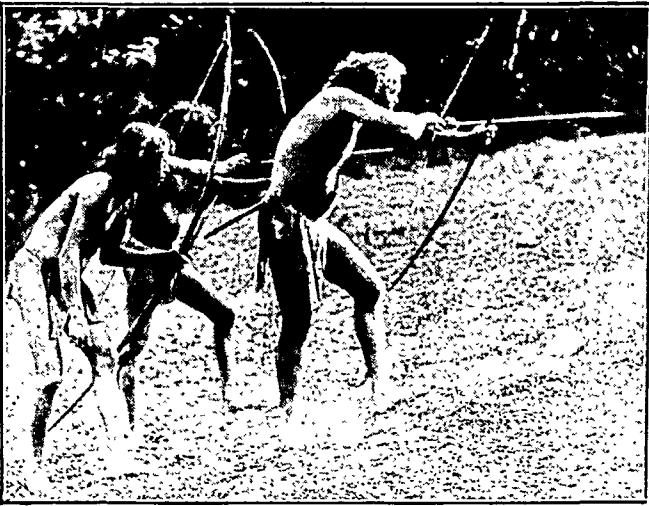
rows of the Dutch have disappeared, but the gardens-in-a-garden remain. That is best realised by imagining the scale reduced, as in a bird's eye-view or air photograph, though then the vast canopy of shade-trees would obscure the whole, merging into one woolly mass interspersed with shorn patches of greensward.

A garden without birds is a dead garden, and we shall not look in vain for the mango-birds, "boats of gold," in the still green foliage, or a strange hiss may give us just warning enough to look up and catch a vision of flying flames, as the paradise fly-catcher flashes in and out of the bushes; a whirling teetotum of burnished purple would betray the sunbird foraging for honey in the flower-beds; while the needle-craft of the tailor-bird may be the reward of search. The dapper magpie-robin is ubiquitous, and, at the right hour, may entertain us with its sweet note. Fly-catchers and swallows wheel overhead, and a species of lark would run

from us in the grass of the parks or duck their heads under the menacing shadow of hovering kestrel or kite. Indeed, the birds of Colombo deserve (and have had) a monograph to themselves!

The Museum.

Before we pass out of the centre of our leafy maze, within which we could be content to roam and dream of eternal summer (so it be that we have avoided the hours of vertical sun), we must spend some time in the excellent Museum, housed in a handsome edifice on beautiful grounds. A fine statue of the founder, Sir William Gregory, Governor from 1872 to 1877, commemorates alike the benefits of his rule and the capacity of the people for a proper appreciation of good government. Here may be noted the attractive specimens of ancient handicrafts, holding out against the mass production of a mechanical age, such as the jewellery, ivory, and tortoise-shell work, damascene, lacquer, pottery, etc., the manifold



[Photo: Plâté, Ltd.]

VEDDAHS, OR WILD MEN OF CEYLON.

uses of the coconut and palmyra palms, the natural history collections, the gems, the beautiful hard timbers, the astounding historical remains, key to an understanding of the buried cities already described, the marvellous Sigiriya frescoes, the palm-leaf stylographed books, and the ancient rock inscriptions, etc. A museum is the place of dead bones, as the Sinhalese word has it, but a spirit of research, or even a sentiment of real sympathy, will have power to make these dead bones live, so that here, if anywhere, the visitor will be able to reconstruct in imagination the island's great past, as his study of present-day life and customs will be brought into sharp focus by what he sees displayed here before him in brief and handy compass.

The Museum is set on the edge of the 100-acre Victoria Park, which is one of Colombo's assets. We shall refer again to the beautiful cricket grounds of the Sinhalese Sports Club, and can pass on to where two high-class tennis clubs, English and Ceylonese respectively, offer some spectacular play; or inspect the magnificent new Town

Hall, tardy recognition of the good work of the representative Municipal Council, or look in at the Orient Club, which, like the Dutch Burgher Union Club elsewhere, is but another instance to show how readily English institutions thrive in this air, or pass out in the direction of the General Hospital, taking on our way three examples of local philanthropy, one a fountain commemorating George Wall, pioneer, politician, and philanthropist; another a statue of a great Sinhalese, Sir Charles de Soysa, prince of philanthropists, who had the distinction of entertaining royalty on his fine estate now decayed, and the third a composite memorial of the whole country, the Victoria Memorial Eye Hospital, itself enshrining the small original nucleus which was the memorial to another son of Ceylon, Sir Samuel Grenier, the Burgher Attorney-General (1886). As we pass up this street we shall see displayed on the boundary wall of a great store, the hypnotic name of Lipton, which has had the power to send people's minds to sleep, for there must still be many in the British Isles who have not yet waked up to the fact that Ceylon is something more than a tea garden belonging to Sir Thomas Lipton!

Outer Circle.

We might, alternatively, emerge towards the outer circle of the labyrinth, in the direction of Slave Island (which, tradition says, was in Dutch times all that the name implies), passing a fair specimen of a banyan-tree that teaches us to look for its betters elsewhere, catching now a fine vista of cool turf-fringed water. We shall have left behind us the splendid Church of St. Michael and the theatre of the noble activities of the Anglican Sisterhood, which latter maintains good girls' schools and has inspired the foundation of a local Order; and shall be reminded of another high-class girls' school we had seen on entering the Cinnamon Gardens. Leftwise from the old Public Hall we pass into a hybrid area, where commercial factors are beginning to be dominant, and where a crowded and slummy quarter has to be avoided on the return, through one of the finest open stretches, to the Fort, which lies spread out before us across an ornamental piece of water.

Or, again, we might pass out southwards into the academic quarter, where a brand-new University College, starting under the very best auspices with the cream of local scholarship, English and Ceylonese, on its lecturing staff, is initiating traditions against the day, not far distant, when it shall fledge out into the University of Colombo. Meanwhile, the lamp of culture has long been kept burning by various learned societies, branches or copies of their English originals, *e.g.*, the Royal Asiatic, the English Association, Society of Arts, etc. Farther on we shall view the Civil Service bungalows, the pride of the local establishment, and the envy of the Indian. It is a provision thoroughly worthy of a handful of men of lofty purpose, who have brought the country to its present pitch of progress, and will now guide it through the difficult initial stages of a new epoch.

Sport.

Here we find ourselves among spacious green sporting grounds, which remind us that, with these wind-swept lawns, the climate of Colombo could not be as intolerable as we had expected to find it, and that life here must have its alleviations. That would not be far off the mark, for it is only during a short spell of overhead sun, or when a drought has lasted more than a few weeks, or in a sunspot maximum, that one sighs for the hills, for rain quickly works a transformation scene, and in a single night the parched grass is green again.

Here are delightful golf links; a magnificent race-course, with good traditions and a long record among the most fashionable of local amenities; the Colombo Cricket Club, to which the same qualification applies; Havelock Park, successor to the old Burgher traditions of another quarter yet to be seen, with cricket fields and golf-course; and many another open bit of sward where youthful Hobbses wield the willow with a gusto equal to any that England affords.

Cricket is a game so well acclimatised in Ceylon for well nigh three generations that some of its players have caught the public eye on British fields, one at least playing for All Scotland and others for College and County; while, since the days of Lord Hawke (1892) Test teams passing through have delighted to meet the local teams, British and Ceylonese together, or an eleven of each. One name at least must be recorded here, and who knows but these lines may meet the eye of some doughty veteran who will recall his feelings when his wicket was disturbed in disconcerting fashion by Tommy Kelaart, the famous Burgher left-hander, who maintained for more than sixteen years the average of five runs a wicket.

Each of the five communities has its club and grounds, and not cricket only, but all games, and other branches of athletics (with the noteworthy inclusion of scouting) have their keen exponents. The grounds of the Sinhalese in Victoria Park rival in beauty and excellence the old-established Colombo (English) Club. Each of these clubs has at some period put into the field a team of English county class.

Schools.

For that noteworthy result it is the larger public schools that have to be thanked. Two of them, the missionary College of St. Thomas and the Government's Royal College, have a tradition more than half-a-century old for the intensive cultivation of sport, more notably the former as a boarding school. Their classic annual contest, the local Eton v. Harrow, has for nearly all that time been one of the most popular social events of the year. (In Kandy they have a vigorous young rival, Trinity College, whose buildings and playing fields are an ornament even to that lovely town.)

And not sport alone, though that is the cement of good fellowship between East and West. For the task of the Government has been more than three parts done for it by the many different reli-

gious bodies, dating back, in fact, to Francis Xavier, that have been engaged in educational work, both in Colombo and in other large towns, for the best part of a century, reaching and maintaining a high standard for a colony and the East. One humble institution, which has recently celebrated its centenary, deserves mention here from its location in a notable district, Cotta, which saw the Indian summer of Sinhalese Royal power under a celebrated Prime Minister in the 15th century.

Loyalty to the old school permeates the whole fabric of life in Ceylon, and the names of former heads and assistant masters are kept green in the loving remembrance of thousands. The annual banquets of Old Boys and the Speech Days are distinguished public functions usually graced by the presence of the Governor or other high official, and marked at times by some momentous statement of policy or like weighty announcement.

At the risk of being fulsome it should be added that the measure of the success of the schools is the crown set upon it by continued academic triumphs at the older English Universities and at the Civil Service Examination, not to speak of other professional honours. Ceylon has a long roll of names of her sons who have made remarkable careers in this and other parts of the Empire, one at least having administered the government of a West Indian Colony.

North Colombo.

Such is the fruit of the labours of the pioneers, including the Dutch, and they embrace missionary and layman alike. The earlier officials and merchants were active in sowing the seed, and the stronghold of the traditions of these men, who, not content with a rootless existence, cultivated a friendly fellowship with the people, is Mutwal, the northern suburb of Colombo, to which we now pass, after crossing a busy area mostly railway territory. Old St. Thomas's College (with the Cathedral Church), Summer Hill, Uplands, Elie House, Hill House, Rock House, Whist Bungalow—these are names to conjure with; and, although the entire district has been commercialised and the Port Commission employees inherit the scene of the former camaraderie, the wit, and the "flow of soul," not to speak of the "beauty and the chivalry" of old Colombo, there are survivors of a former generation who cherish the memory of those larger and more liberal days with wistful regret.

The interest of this suburb is now mainly commercial, and the visitor would mark the spreading tentacles of the port, to which reference has been made; but the aesthetic would not be wholly without witness if, for instance, he could stand on the old College hill in a misty dawn and, looking back upon the harbour, cast his astonished eyes on what is nothing less than a Turner battle-piece, or watch from the water-stairs of Whist Bungalow the eternal battle between the sea and the Kelani River, when the long sandspit is hourly devoured by the

hungry waters ; or view the fishing fleet come in on the top of the wave with sails bladder-taut in the breeze ; or espy, across the strong-flowing river, where the woods come down to the water's edge, the old Dutch canal to pretty Negombo (home of cinnamon) running straight and true under an archway of palms.

And it is here at last that he will find the homes of the common people, scattered among the cottages of the "classes," whom the ebb of migration has left high and dry in a quarter that can only be described as *passé*. From here, as from other suburbs near and far (notably Kotahena, with its grand Roman Catholic Cathedral, visible from the harbour), an army of workers, filling more or less humble positions in the Fort and Pettah and in the Government railway and other engineering establishments, sallies out daily, coated and sandalled for the most part, and nearly all carrying the indispensable umbrella, which surely is the one peculiar feature of Ceylon streets. The homing throngs in the afternoon and

that use the verandahs as pavements, skirting the outdoor stands of the apple-men and the sellers of oily Indian sweetmeats ; the importunity of the men at the shop-doors ; the constantly shifting yet never-changing scene ; the shining, nude backs of coolies at one end of the scale, which runs up through various gradations of undress and overdress till it terminates in the sleek, half-draped paunch of the Chetty millionaire ; and, recapitulating the whole effect, the public market behind the (old) Town Hall, where the entire gamut of sound and the whole spectrum of colour assail eye and ear.

Such is the Pettah ; and when the stranger has recovered from the assault to his senses and has begun to think that he has seen the real Colombo, it would be time to inform him that what he has seen is really an Indian settlement entirely alien to the country ! The Sinhalese do not take kindly to retail trade (though they are at home in big business), and various Indian communities have taken root here for generations, while the whole fabric



[Photo: Plâté, Ltd.]

GALLE FACE, LOOKING TOWARDS THE ECHELON BARRACKS, COLOMBO.

evening hours give the lie to the statement frequently made in books about Ceylon that the Pettah is "where the natives live."

The Pettah.

This is the quarter that has always exercised a fascination for the traveller who is a stranger to the East. Its din and bustle, its colour and its diverse smells ; the heterogeneous mob that is never off its streets ; the publicity of all its activities with *al fresco* chaffering and trade and eating and drinking ; the artless, casual way in which the young fruit-seller from the country, lips carmine with betel-quid, dumps her baskets of polychromatic treasures by the roadside and cuts a side of pine-apple or jak, or opens a young coconut for a passing customer, who will pause to relish it on the spot, innocent of sinks and bins ; the scraps of shouted commentary across the narrow street, seeming to merge and mingle into incessant chatter ; the block in the traffic when two motor-cars and a tramcar come together and the pedestrian leaps for safety on to a verandah (if he does not come a cropper on a banana peel) ; the crowds

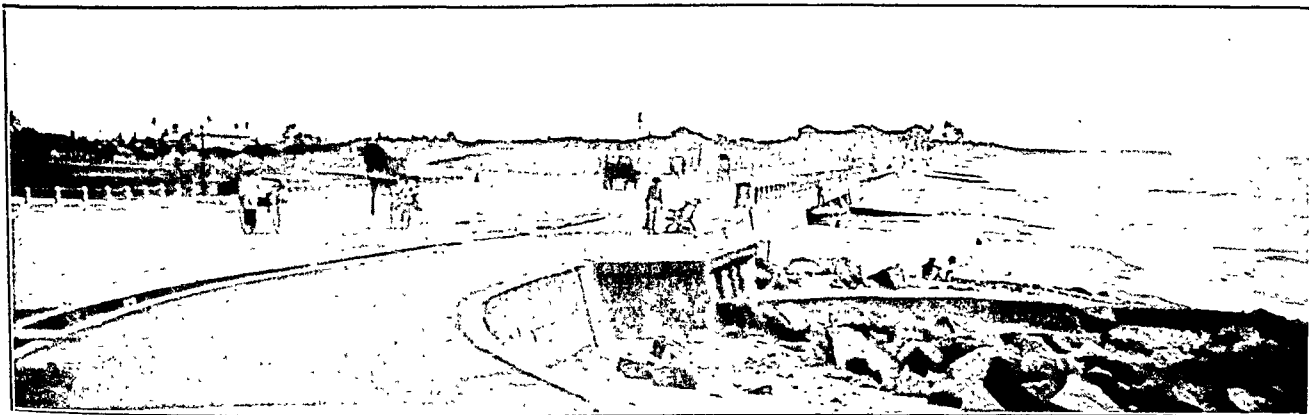
of their trade is shot with the financial acumen of the Chetty, whose stronghold in Sea Street should not be missed for its strange combination of literally sunless treasures, the simple life, and strict Hindu observance.

These shops in the Pettah understudy the European establishments in the Fort, and complete for an overlapping custom, though humbler pockets are also catered for. Drapery, hosiery, books, hardware, groceries, plate and lamp shops, are huddled together in street and cross-street, each with a single narrow frontage, until variety is defeated, and the only marked difference is made by the rare presence of a Sinhalese merchant striking out in more original and ambitious directions.

Nor does the surprise end there. For the further fact remains to be disclosed that this area, which has been allowed in the course of generations, without any heed to town planning, to acquire unto itself the most crazy and squalid excrescences, until it has become to-day a blot and a reproach, with vested interests holding up an enlightened municipality, was once a respectable residential quarter. All that remains to prove it is the Dutch

cemetery, the melancholy appeal of which is being smothered more and more under the ramifications of trade, and the curfew bell and belfry, together with the old Dutch name of Cayman's Gate. But we have, besides, in addition to the traditions of the old Dutch families, the evidence of Walsh's *Military Reminiscences*, where it is stated that "the Pettah had also several good houses, churches, etc., and in the place, altogether, were many respectable inhabitants." Of the churches, the newer (St. Paul's) has just bowed to the inevitable and has a quieter home in Campbell Park, which limits of space prevent describing here, but it is equal to the best in charm; and the other, the Dutch Reformed Church, a real Dutch relic, typical of the architecture of the Low Countries, built in 1749, in Wolvendaal (Wolves' Dale), where former Dutch Governors and *mynheers* with their pomp-loving *vrouws* sat to hear long discourses, and where such of their successors to-day as cling to the old Protestantism do the same amid the memorial tablets of the illustrious dead.

scope for its legitimate aspirations and a field for the display of good qualities of trustworthiness and efficiency. In fact, there is not a single high judicial or administrative post, even up to those of Chief Justice and Colonial Secretary, but a son of the soil has at some period been found worthy to fill it, though policy dictate that it shall be but temporarily. To-day the elective office of Vice-President of the Council, the Supreme Judicature, the highest law offices, the posts of Chief Government Surgeons and Physicians (and practically the whole Medical Service), leading Police, Post, and Telegraph, Volunteer Force, Engineering, and Survey appointments are filled, permanently in some instances, by excellent precedent, though temporarily in others, by Ceylonese, to praise whom would be an impertinence. The cry for more scope for talent and ambition cannot but be heard, and the answer will be in the same generous spirit that moved the early pioneers to give their lives in the spade-work of yesterday, which alone



[Photo: Plâté, Ltd.]

GALLE FACE, LOOKING TOWARDS GALLE FACE HOTEL, COLOMBO.

Later Burgher traditions have centered round the "Racquet Court," which is now given over to the excellent ratproof rice stores already referred to. This was the cradle of Ceylonese cricket, and though it has vanished from the view its memories remain.

Hulftsdorp.

Let us pass from the fine eminence of Wolvendaal, overlooking the sea, to its twin, Hulftsdorp, named after the Dutch General Hulft, which is sacred to the law and the theatre *par excellence* of purely Ceylonese achievement. We shall learn of respected Ceylonese judges and lawyers, remembering that the term includes Burghers, Sinhalese, Tamils, and a few others. We shall note the jealous guarding of great traditions and shall find here the training-ground for larger political and administrative responsibilities.

Conclusion.

It is convenient to close this sketch of Colombo on that note, for the legal profession is typical though not unique; the medical, engineering, and other professions, likewise, offer young Ceylon bare

has made possible the foundations of the edifice of the morrow.

Our account of Ceylon's principal city must now end, although it is necessarily incomplete. We have not said much, for instance, of the British colonists specifically, but have preferred to treat the island as a composite unit of the Empire, where all are working together for the good of the whole. There are those who have gone out to Ceylon purely for trade or business or to the big plantations, all undeniably conducive to the welfare of the island and world-commerce. While some of them, however, pull their weight as members of the "Commonwealth," others, it must be granted, prefer in an alien spirit to regard the island as but the temporary scene of their unavoidable exile, failing to understand how their brothers and sisters, cast in a more generous mould, joy to think of it as a second home, which tugs at their heart-strings with a pull strong enough to make them waver in a divided allegiance, while "not once or twice" the election has been in favour of the tinier Isle of Enchantment!

COMMERCIAL COLOMBO.

CARGILLS, LTD., Universal Providers, York Street.

CARGILLS! What a name that is throughout Ceylon, and how vast is the range of supplies which it connotes! All over the island, in the homes of the rich and the poor, the name is a household one that is lisped by little children, who hear it so frequently mentioned in connection with everything pertaining to life's daily routine. Even amongst the people who do not speak English, Cargills is a familiar synonym for merchandise as varied as human necessity itself. Every person

struction of the edifice, and it was completed in 1905.

In the spacious Cargills arcade the artistic displays in the handsome plate-glass windows can be inspected in comfortable shelter from the tropical sun or rain; but better far to pass through one of the many entrances and make a tour of the spacious and well-ventilated interior, where everything is arranged on a scale of utility and completeness harmonising in every way with the



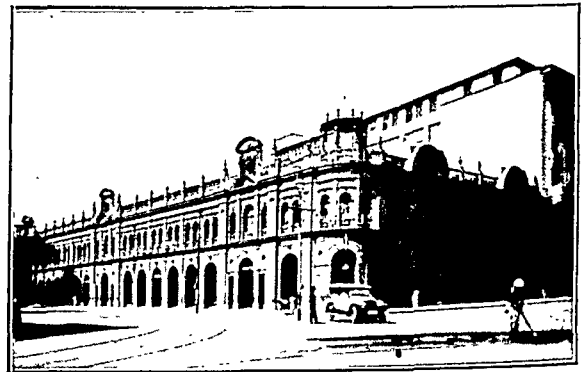
DEPARTMENT FOR GROCERIES, WINES AND SPIRITS.



LADIES' AND GENTLEMEN'S OUTFITTING DEPARTMENT.



PHARMACEUTICAL DEPARTMENT.



"CARGILLS."

PREMISES OF CARGILLS, LTD., COLOMBO.

who can see or hear, visiting Colombo, must carry away some memory of Cargills, Ltd. The only way for a steamer passenger to escape receiving actual visual impressions of the celebrated firm is to refrain from going ashore; but even then there will be talk about the business when the visitors return with their purchases.

The Cargills establishment looms large and impressive in the immediate perspective of Colombo's chief shopping district, and was the forerunner of many of the fine buildings there. Its colour is the red of life's vitality, and cornucopiæ are appropriately embodied in the stone ornamentation of the great house of plenty that calls to the stranger as well as to the permanent resident with many allurements. Four years were spent in the con-

prominence of the firm in local trade. The person able to differentiate between mediocrity and superiority in general merchandise, but more especially in the infinity of things pertaining to the outfitting of both sexes, will find a visit to Messrs. Cargills' premises prolific of much more extensive purchases than may be intended there. Temptation in that connection is exceptionally powerful in the departments for ladies' clothing, where lovely dresses of the filmiest materials and the latest fashions, in exquisite shades, vie with captivating millinery creations, each of irresistible individuality, and all in so great a variety that uncommon indeed must the requirements be which cannot be met there.

The tailoring departments are characterised by

all those details of careful selection and operative skill inseparable from every sartorial establishment where output is made subservient to perfection of fit and fashion.

The workrooms for the dressmakers, milliners, and tailors, including European cutters, and the busy activities there, indicate very eloquently how greatly the firm's facilities and resources in that connection are taken advantage of.

But it is impossible within the limits of this restricted sketch to even attempt a description of the many other departments (thirty in all) or to note the claims of each for special recognition in connection with the wealth of its stock or the care with which its organisation has been evolved for the maximum of service and minimum of waste or inconvenience to everyone concerned—groceries and provisions, wines and spirits, jewellery, watches and clocks, electro-plate and silverware, glassware and crockery, gramophones, stationery, fancy goods, pedal and motor cycles, hardware and household utensils, etc. A separate volume could easily be produced for a delineation in detail of the many different departments, each operated like a separate business, but forming one great whole on which is ever concentrated expert knowledge and experience that takes cognizance of all the innumerable idiosyncrasies of local requirement as well as universal demand.

The elegant department for drugs and chemicals, for instance, giving employment to six qualified dispensers, is replete with everything that can be suggested for the relief of pain and illness and the enhancement of physical welfare.

The firm transact wholesale as well as retail trade, and are manufacturers of many of their own preparations, including the well-known and very successful "Cargilineum" mixture for rubber trees, of which mixture they produce about ten tons monthly. Contiguous to the pharmaceutical department is the optical department where sight defects are tested and remedied under the

supervision of the only Fellow of the British Optical Association practising in Ceylon.

Extensive as the premises are, the business has outgrown them, and at the time of writing arrangements are being made for additions that will increase the floor space by fifty per cent.

The history of the business dates back to 1844, when it was started at Kandy under the name of Milne, Cargill and Co. When Colombo became a port of call, the firm followed the trend of business there and steadily grew in importance in the city, retaining, however, the Kandy establishment. Later the designation became Cargill and Co., and the firm continued to prosper through the halcyon days of the coffee industry. When that failed, however, the business, like practically every other Ceylon concern, underwent severe vicissitudes, and was one of the few which survived the collapse of the then staple industry of the island. The phenomenal progress of the tea industry of Ceylon led to corresponding development of Messrs. Cargill and Co.'s activities. In 1896 the present limited liability company was formed. The business gives employment to about five hundred persons, including about sixty Europeans, and there are branches of it at Cinnamon Gardens, Galle Face, and Nuwara Eliya, as well as at Kandy, with forage mills in Staples Street, Colombo. The general department store under the designation of **SIME and CO.**, contiguous to Messrs. Cargills' establishment in Colombo, also belongs to the company, but is operated separately under its own name.

The directors of Messrs. Cargills, Ltd., are Sir J. T. Cargill, Bart., Messrs. B. Connell, J. Mathieson, A. J. Martin, and T. R. Mitchell. The general manager is Mr. G. R. Brown. The company's cable address is "Cargills," Colombo, and they use the A B C code.

The London office is at Balfour House, Finsbury Pavement, E.C., and the registered office is at 163, Hope Street, Glasgow.

LIPTON, LTD., Tea Blenders and Exporters, etc., Union Place, Slave Island.

THROUGHOUT the world no name is more popularly associated with the tea industry of Ceylon than that of Lipton, Ltd. In cottage and mansion, in village and city, in inaccessible places far remote from civilisation, and in fashionable tea-shops and restaurants in the world's leading centres of wealth and activity, Lipton's tea is in high esteem, and has given to Ceylon an advertisement beyond comparison. When passengers from the steamers land at Colombo for a brief tour of inspection of the city and its environs, there is always at the back of their minds the memories and impressions of the fragrant Lipton tea; and these memories and impressions are recalled vividly and pleasantly by the sight of the premises of Messrs. Lipton, Ltd., in the beautiful district of the Cinnamon Gardens, at the end of Union Place, one of the principal thoroughfares of Colombo. It is so reminiscent of home in Great Britain, Australia,

United States, Canada and elsewhere to see the name of Lipton, Ltd.; but to see it in a tropical setting in the lovely island it has made so famous, explains the ejaculations of thousands of visitors to Colombo, when the local premises of the great firm in question suddenly come into the range of their vision.

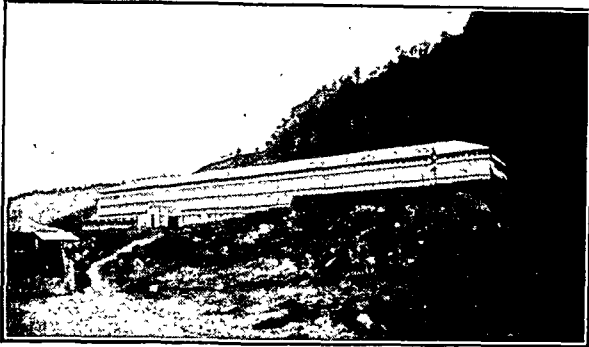
Much has always been made of the celebrated Lipton tea estates in Ceylon, and their names may be read from afar painted in white letters on the dark curving walls enclosing the Maddema Mills, as the premises in question are designated.

The company's estates, totalling about 8,000 acres, are magnificently situated at a high elevation in dry and invigorating air, peculiarly favourable for the cultivation of tea of the highest quality. The bulk of the company's tea land in Dambattenne is on the slopes of lofty hills, upon which there is no room for buildings as on the

other estates; so that the difficulty of preparing the tea there has been overcome by the provision of a system of aerial tramways which transmit the produce as gathered from the gardens to the factory in the valley below. Thousands of Tamil coolies are employed on the Lipton estates, and the utmost attention is paid to the comfort of their homes and their medical and other requirements.

out evenly on perforated trays and fired in a specially contrived drying machine by means of heated air at about 200° F. It is then allowed to cool and is afterwards graded and packed for shipment to all parts of the world.

A bulky and interesting volume could be written about the huge business built up by Sir Thomas Lipton, and the great influence exerted in its development and success by his lucky acquisition



DAMBATENE FACTORY.



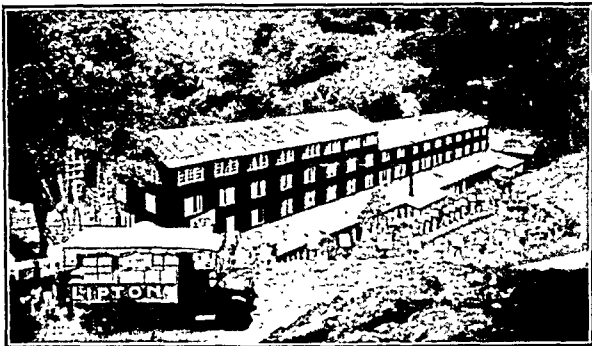
DESPATCHING TEA FROM DAMBATENE FACTORY.



DAMBATENE BUNGALOW.



PICKING TEA, BANDIA ELIYA.



MONERKANDE FACTORY.



ROAD IN THE MONERKANDE PLANTATIONS.

SCENES IN THE TEA PLANTATIONS OF LIPTON, LTD., CEYLON.

So fine is the method of plucking on the Lipton tea gardens that many pounds of green leaf are necessary to make one pound of manufactured tea. After the green leaf is gathered it is exposed for some time in the factories in a light, dry atmosphere to wither. It is then rolled by powerful machinery in order that the sap may be crushed out, and is afterwards separated and allowed to ferment, great care being necessary during the latter process. The green leaf is thereafter spread

long ago of the magnificent estates whence the celebrated Lipton tea of Ceylon is derived. Suffice it to say, however, that the record price of £36 15s. od. per lb. has been obtained in the Mincing Lane sales room for a parcel of Golden Tipped Flowery Orange Pekoe from Lipton's Dambatene estate.

The company's manager in Ceylon is Mr. H. H. Sutherland, who has been connected with the firm since 1911.

DARLEY, BUTLER and CO., LTD.,
General Merchants and Commission Agents, 69, Queen Street, Fort.

THE large and handsome office buildings erected in Colombo during recent years have greatly changed the appearance of the city from what it was when the writer first knew it in 1900. Consequently the busy, sunny, island capital provides great contrasts between the old and the new, more especially in and around the Fort district, where the former Dutch colonists centred their affairs before Ceylon became British in 1796. Here and there are some old structures which are delightfully reminiscent of the long forgotten past; but none used for commercial purposes is more worthy of notice than the premises in which the business of Messrs. Darley, Butler and Co., Ltd., has been carried on for many decades. These premises are much more extensive than might be inferred from their outward appearance. A fire in 1924 destroyed the top floor of the office building and all the interesting records of this famous old concern, but it did not injure the thick and strong walls; so that the aspect of the establishment as it stands to-day, with its square turreted top, is probably exactly the same as it was in the eighteenth century. The date of its erection cannot be ascertained, but in one of its ancient sections there is a remarkable strong-room where, it is asserted, the last King of Kandy, the notorious Sri Vikrama Rajasinha, was imprisoned before he was sent in 1816 to the fortress of Vellore, in the Madras Presidency, where he died in 1832. The cell, or dungeon, in question has a convex roof, and is so strong that it would undoubtedly remain intact if the whole of the structure into which it is built collapsed about it. The great thickness of its walls is discerned by the two narrow air vents on each side of the old steel entrance door. When the writer inspected it for the purpose of this sketch, its contents included some fine old wines—and what could be more highly prized in these days of fantastic legislation and spurious imitations of the liquors of long ago!

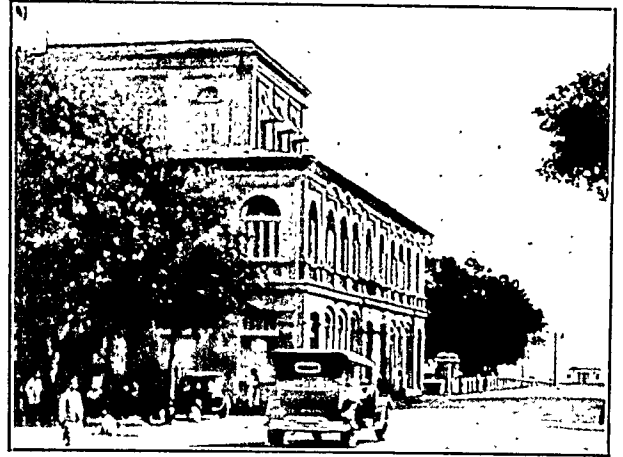
Behind the main building is a curious old courtyard—surely the oldest and quaintest in Colombo. Sloping down towards it are the red-tiled roofs of extremely old warehouses, where the impressions of the past are very vivid. What a place it could be, and probably is, for ghosts of long dead persons who had to do with merchandise of every description!

On one side of the courtyard is a building called the King's Warehouse devoted entirely to the firm's bonded stock, access to which can only be obtained in the presence of a Customs official. Messrs. Darley, Butler and Co., Ltd., are one of the few firms in Colombo with such a facility on their premises.

Other buildings opening into the courtyard are so old and unsuited to modern storage requirements that they are utilised only for the accommo-

dation of boxes and things of general utility. The floors of these old warehouses are a succession of ups and downs, and some of them have been so frequently repaired that in some places not much of the original timber remains.

The sections in which the trade activities of Messrs. Darley, Butler and Co., Ltd., are con-



PREMISES OF DARLEY, BUTLER and CO., LTD.

ducted are very different, and provide ample indications of the care there exercised for the perfection of everything relating thereto. The firm are amongst the largest exporters of Ceylon tea, and were amongst the first to engage in that industry after the failure of Ceylon coffee in 1876. Rubber and all the productions of the island are handled by them. They may be regarded as pioneers in the piece-goods trade of Ceylon, and in that connection still transact an extensive trade. As general commission agents they have connections throughout the world.

The business is probably the oldest in Colombo, and was founded in 1847 by Mr. E. J. Darley and Mr. (later Sir) Samuel Butler, who had previously been partner in the firm of Ackland, Boyd and Co. Mr. Darley, who died in 1870, is commemorated by Darley Road, one of the important business thoroughfares of Colombo. In 1860 Sir Samuel Butler retired to London and supervised the firm's interests at the office which was then opened for that purpose there. In 1863 the late Sir William Mitchell became partner and proceeded to Colombo, where he lived for fifty-two years. Sir William Mitchell was the representative of the mercantile community in the Legislative Council for about twenty years, and was the first elected Chairman of the Chamber of Commerce in 1869, serving as a Committee member for thirty-five years.

During the administration of Sir Arthur Havelock, Governor of Ceylon, Sir William (then Mr.)

Mitchell was created a C.M.G. in recognition of his public service to the colony. He was Chairman of the Wharf and Warehouse Co. for many years. He was also connected with the Colombo Hotels Co., Ltd., The Colombo Apothecaries Co., Ltd., The New Colombo Ice Co., Ltd., Spinning and Weaving Mills, and many other concerns. He was a member of the Colombo Harbour Board from its inception, and manifested a lively interest in all matters pertaining to the development of the port. In the agitation for the establishment of a Port Trust, which occupied the attention of the mercantile community for a number of years, he took a prominent and leading part.

Sir William represented the mercantile community at the Diamond Jubilee of Queen Victoria in 1897, and had the honour of presenting the address of the Chamber to Her Majesty in person. He represented the Chamber at the Paris Exposition in 1900. While he was there, news reached Ceylon that amongst the birthday honours was a Knighthood for him in recognition of the services he had rendered to the colony during his long and distinguished career.

Meanwhile Sir Samuel Butler had retired from the business in 1884, and it was thereafter carried on by Sir William, who was joined in partnership in 1896 by Mr. J. F. Headrick and Sir William's son, Mr. W. E. Mitchell—the latter having been connected with it since 1886. In 1911 Mr. Headrick retired, and after Sir William's death in 1915, the business was conducted by Messrs. W. E. and F. S. Mitchell as sole partners until July, 1920,

when the present limited liability company was formed with an authorised capital of Rs.5,000,000.

The Board of Directors now comprises Messrs. F. S. Mitchell (Chairman); W. E. Mitchell; W. A. Cole; O. F. Rust; J. M. Souter, and S. G. A. Julius.

The company's telegraphic address is "Darley," Colombo, and the codes used are Bentley's and the A B C 5th edition.

Messrs. Darley, Butler and Co., Ltd., are agents for the following:

Darley, Butler & Drew, Ltd., London.
 A. Provant & Co., Manchester.
 George Woolley & Co., Ltd., Manchester.
 Sternberg Bros., Manchester.
 Mellon & Co., Manchester.
 East Asiatic Co., Ltd., Bangkok and Singapore.
 S. H. Ewing & Co., Montreal.
 Scottish Union & National Insurance Co.
 American Trading Co., Ltd., New York.
 S. L. Jones & Co., San Francisco.
 Gollan & Co., Adelaide, Melbourne, Sydney, and Wellington.
 Chargeurs Reunis Line of Steamers.
 Maritime Insurance Co., Ltd.
 Northern Assurance Co., Ltd.
 Union Insurance Society of Canton, Ltd.
 Queens Insurance Co., Ltd.
 The Home Insurance Co.
 Western Assurance Co.
 Underwriters at Lloyd's.
 The Gangwarily Estates Co. of Ceylon, Ltd.
 The Ceylon Land & Produce Co., Ltd. (S.A.).
 The Gartmore (Ceylon) Tea Co., Ltd. (S.A.).
 The Piccadilly Rubber & Tea Estates, Ltd.
 The Lugaloya Tea & Rubber Co., Ltd.

BROOKE BOND CEYLON, LTD., Assambrook Mills, Slave Island.

THE name of Brooke Bond is famous to the uttermost parts of the earth. Anyone not versed in what it stands for is uneducated in modern commercial enterprise, which must always have examples of comparison and achievement. Even the lowliest of people, whose range of knowledge is of the most circumscribed character, have an appreciative familiarity with the name of Brooke Bond, and would uphold it against all competitors. Brooke Bond is almost in the dictionary as a synonym for tea; and it may be regarded as amongst the dozen best-known commodities of modern trade. The eminent firm which it designates have huge warehouses in London, Manchester, Leeds, and elsewhere; and in grocery shops throughout Great Britain the Brooke Bond packages are demanded with an emphasis that will not be put off with other brands.

The great Brooke Bond business, like other celebrated undertakings, has certainly been built up largely by advertising, but not altogether. Millions of pounds may be spent in booming anything, but if the commodity is not worthy of its publicity, the money will surely be wasted. No people in the world are better judges of tea than the

British. We cannot do without it, and its absolute indispensability has raised the standard of necessary quality very high indeed, which explains Brooke Bond.

In the south of India the Brooke Bond Company have about 50,000 acres of tea estates, and very large premises at Calcutta and Bombay. In Ceylon, where they have been operating since 1919 under the name of Brooke Bond Ceylon, Ltd., their tea lands, Allakolla, Ratnatenne, and Udaveria, aggregate 3,185 acres, and are amongst the best in the island.

The company's Assambrook Mills, in Slave Island, Colombo, are amongst the largest industrial establishments devoted to tea and produce in Ceylon. These mills have recently been completely remodelled, and considerable additions made to them. They occupy about 3 acres, and give employment to about 800 persons. The busy scenes there afford exceedingly interesting and instructive object lessons in the methods of preparing tea and other products for shipment abroad. Certain hand operations—and they are many—cannot be enhanced by any mechanical process, and will continue as long as tea is con-

sumed, which will doubtless be for ever; nevertheless, there are many remarkable contrivances in the Assambrook Mills which reduce labour to a minimum, and ensure beyond peradventure the accuracy of qualities and measurements in leadfoil packages, in standard chests, in marks and labels, etc. All the work is executed in a chain of specialised activities, each dependent upon and influencing the other; and throughout it all is manifested undeviating regard for the exemplification of the superlative in every detail; hence the continual expansion of the Brooke Bond business.

In addition to tea, great quantities of other Ceylon products, such as desiccated coconut, cocoa, rubber, etc., pass through the Assambrook Mills, and are shipped to all parts of the world.

The mills have their own printing department for labels, etc., and the company also import estate supplies on a large scale.

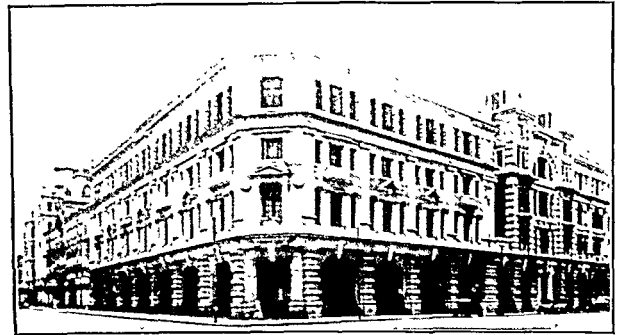
The managing director of Brooke Bond Ceylon, Ltd., Mr. R. E. Southwood, is a tea expert of long and extensive experience; so also is the other director, Mr. W. Trevellick Hicks. The company's cable address is "Assambrook," Colombo, and the code used is the A B C 6th edition.

Messrs. Brooke Bond Ceylon, Ltd., are agents and secretaries for Brampton Tea Co., Ltd.; Koralie Tea Estates, Ltd., consisting of Glenloch Estates, Wewesse Estates, Riverside Estates; The Downside Estate Co., Ltd.

COLOMBO APOTHECARIES CO., LTD. (SMITH CAMPBELL and CO.),
Chemists and Druggists, General Merchants, Outfitters, Furniture Manufacturers, Printers,
Booksellers, Stationery Manufacturers, etc., Fort.

COLOMBO APOTHECARIES Co. That well-known name is suggestive of the days of long ago when the alchemists sought the elixir of life, and the establishments of the apothecaries had not evolved from the crude limitations of the remedial agents then in vogue into the pharmacies of the modern highly-trained chemists and druggists; but even the latter are now, in most centres of population, being merged to a considerable extent into departments of the huge general stores that are playing so prominent a part in the consolidation of modern retail trade. So it is at Colombo, where the large business of the Colombo Apothecaries Co., Ltd., is quite at variance with the restrictions which might be suggested to the uninitiated by its title. Throughout all the ramifications of the undertaking in question, the novelties of last year or last month are replaced by substitutes of improved utility and attraction. The great assortments of merchandise quickly come and go; department after department is added; indeed, other concerns are merged into the ever-expanding business, but the name remains unaltered as it was when it was the designation of the little chemists' shop opened in 1883 in the de Soysa Buildings, Slave Island. Why should that humble little venture have been followed by such remarkable results? Thousands of little chemists' shops, or, should we say, chemists' little shops, have been established in thousands of promising places, but in those that continue to exist the passing years show no change in the dimensions of their trade or character. The district of Slave Island was not particularly good for a chemists' shop—at least not in the latter part of last century, and the proprietors, Mr. W. M. Smith and Mr. James Smith Findlay, being men of ambition, removed their little business into another establishment at the corner of York and Prince Street, Fort. Their new pharmacy was

also small, but it had the advantage of being close to the jetty, where the people from the steamers landed, and was thus prominent in the line of attraction of the great tide of passenger traffic that ever flows through Colombo. Such was the commencement of the extensive business that to-day gives employment to about 500 persons and caters to that traffic, as well as to the requirements of the inhabitants of Ceylon, with a thoroughness that includes everything pertaining to life's daily routine on land and sea.



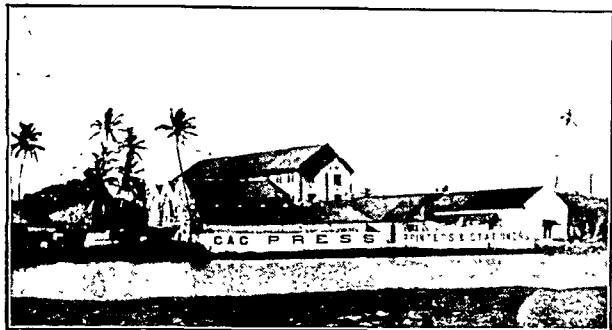
PREMISES OF
COLOMBO APOTHECARIES CO., LTD.

The story of its rise and progress in detail would occupy many pages and must be curtailed. In 1904 the gentlemen's tailoring and outfitting business of Smith, Campbell and Co., and also the one that had been carried on by Mann and Co., manufacturers of saddlery and harness, importers of footwear, etc., were acquired by the Colombo Apothecaries Co., Ltd. These were followed in 1917 by the absorption of The Anglo-Oriental Furnishing Co.

The building housing the many departments of the Colombo Apothecaries Co., Ltd., was completed in 1915, and covers an area of 15,000 square feet. It has four floors, each connected by

an electric elevator, as well as by broad staircases, and each of these numerous departments is operated as a separate business. Those for ladies' outfitting are ever a source of great attraction to the fair sex, for in them are to be found the latest styles from Paris and London, with particular regard to specialities of fabric and fancy for use in the tropics as well as in more temperate zones.

The gentlemen's tailoring and outfitting sections are still carried on under the name of Smith Campbell and Co., and as all the workshops are



C.A.C. PRESS, SLAVE ISLAND.
Printing Works of Colombo Apothecaries Co., Ltd.



**DISPENSARY OF
COLOMBO APOTHECARIES CO., LTD.**

on the premises, customers have the satisfaction of knowing that their orders are fulfilled under the most commendable and sanitary conditions—a point of great importance in the Orient regarding the execution of tailoring work. The following is from the firm's handsomely got-up catalogue entitled *Gifts—Suggestions for Men*.

"Fine kerchiefs for gay gallants. So runs the legend. And as the gallants of the 'periods' trip past the shop which displays the gay silk squares, each in his turn pauses. For the many-coloured handkerchief is a thing of beauty and its purchase a delight. The Early Stuart, elegant with voluminous cloak; the Restoration beau, very straight; the much bewigged gallant of 1700, our fine fellows from the 'Beggars' Opera'; the snuffy fop

of George the First—Oh, and many others right up to the large-trousered young man we know so well. He! What part has he with these highly-coloured gentlemen of the past? Just this, that his finishing touch of personal distinction is still the brilliant handkerchief—more elegant to-day than ever before in its long and glorious history.

"On the following pages are just a few selections from the colossal handkerchief assortment of Smith, Campbell and Co., enlivened with coloured illustrations of the actual silk handkerchiefs we have in stock."

That extract is eloquently suggestive of the skill and good taste pervading the company's alluring sartorial service and supplies.

The whole of the second floor is devoted to household requisites and suites of every description, office equipment well calculated to please the most fastidious demands, and all the odds and ends of things comprised under the term furniture in an exceedingly interesting diversity of design. They are made of Ceylon and other Eastern woods at the company's factory in Slave Island, previously carried on by The Anglo-Oriental Furniture Co. already mentioned.

On the ground floor is the pharmaceutical department, which amply justifies the retention of the company's title, and would be a very notable business by itself. Four qualified Europeans are employed in its dispensing department, contiguous to which is the section for Kodak goods and photographic materials of all kinds, where a special organisation has been evolved for the rapid as well as perfect development and printing of customers' films and plates in view of the comparatively short period during which passengers remain in Colombo.

But it is impossible in this brief review to do more than merely indicate the other departments, such as books and stationery, silver and plated goods, watches, clocks and jewellery, general fancy goods, travelling requisites, glass, crockery, hardware, wines and spirits, groceries, provisions and confectionery, etc.

Probably the most impressive of all the many sections of the business is the company's large printing works, occupying about half an acre in Slave Island, where everything pertaining to printing and its allied activities, such as the manufacture of stationery and account books, machine-ruling, bookbinding, block-making, etc., is carried on with skill and enterprise. The printing plant was originally established in 1901 for the company's own requirements, and the development it has attained is in keeping with the expansion and progress characteristic of the entire business since its commencement.

The general manager is Mr. F. Trollope, who has been connected with the concern since 1896. The cable address is "Apothecary," and the codes used are the A B C 4th and 5th editions.

H. L. DE MEL and CO., Exporters and Importers, Insurance Agents, Owners of Estates, Graphite Mines, Mills, Brush and Broom Factory, etc., etc., De Mel Building, Chatham Street, Fort.

No family in Ceylon has been longer nor more influentially connected with the development of the commerce and industry of the island than the "De Mels," who can trace their lineage back to 1534. One of the modern office buildings in the Fort of Colombo is called the De Mel Building, and on its third floor are the offices of the proprietors of that structure, Messrs. H. L. De Mel and Co., whose extensive combination of commercial, industrial and agricultural undertakings, employing upwards of 3,000 people, contributes to the importance of Ceylon as one of the richest exporting colonies of the British Empire. The great interests of Messrs. H. L. de Mel and Co. represent the accumulated knowledge and experience of generations of De Mel business men, each handing down to his succeeding son continually increasing assets in land and buildings, industrial achievements, and commercial connections encircling the globe.

The present head of the "De Mel" firm is Mr. H. L. De Mel, C.B.E., J.P., whose father, the late Mr. Jacob De Mel, did probably more than any of his ancestors in making the "De Mel" name prominent and influential in Ceylon's economic development. Owning and managing coconut, cinnamon, and tea estates, of an aggregate area of about 5,000 acres, large fibre mills at Madampe, in the Chilaw district, and flourishing commercial undertakings in Colombo, the activities of the late Mr. Jacob De Mel were many and varied. Nevertheless, in 1870 he turned his attention to the great potentialities that lay in the development of Ceylon plumbago, and became the pioneer of that industry. It was he who discovered the rich Ragedera mine at Kurunegala, which was photographed by a representative of Nobel's Explosives, and was the first mine in the East where explosives in mining for plumbago were used. That was the surest foundation of the De Mel plumbago industry, and for the purpose of learning something about the business, the present writer was courteously received and shown over the firm's remarkable factories and other premises, occupying more than thirteen acres of land on the "Model Farm Estate," at Colombo, where, amongst many other operations, the plumbago, as received from the mines, is prepared for shipment to all parts of the world.

The plumbago, or true vein graphite, of Ceylon will be familiar to the ordinary reader as black lead, which, in its chemical relation, is totally different from all other forms of carbon. The Ceylon plumbago is the purest and best in the world, and is exceedingly refractory. A piece of Ceylon plumbago with sharp needlelike projecting angles can be subjected to a heat which melts steel and yet not have any of its finest points affected in any way. Plumbago with 99 per cent. of graphitic carbon, or only 1 per cent. ash, can be supplied by Ceylon only. It is used chiefly in

the manufacture of crucibles, stove lead, pencils, greases, paints, and electrodes. Its invaluable character in the manufacture of explosives and the great modern steel guns, armour plates, and



The world renowned plumbago mine in Ragedera Kurunegala, Ceylon, opened by the late Mr. Jacob De Mel in 1870, now the property of Mr. H. L. De Mel, C.B.E., J.P. Chairman of the Ceylon Merchants' Chamber.

The photograph, taken in 1881, shows the pit head gear and hauling tackle, also workmen descending by ladders. The mine, which stopped working a few years ago, was 1,000 feet deep.

armaments led to Ceylon being called upon by Great Britain and her Allies during the War to double the amount of plumbago which she had been exporting prior to the outbreak of hostilities. Thus, in contrast to the 15,000 tons exported from Ceylon in 1913, the amount during the years 1916

and 1917 rose to not less than 59,607 tons, of a value of 24½ millions of rupees. Mr. De Mel's mines are in different parts of Ceylon, and his plumbago has been awarded gold medals and diplomas at the Paris, Chicago, St. Louis, London, Colonial, Wembley, and other Exhibitions.

After the Armistice Mr. H. L. De Mel studied in America, Germany, and other countries, the modern requirements in connection with Ceylon plumbago, with the result that now at his factory in Colombo there are in operation methods and machinery embodying everything that can be suggested for the perfection of the work done there to meet up to date economic conditions. In the well-equipped chemical laboratory the plumbago is tested and guaranteed according to its various specified grades and characteristic constituents.

The great De Mel establishment in Colombo has been evolved into a self-contained little world of its own, where the welfare of the many hundreds of people employed is studied with affectionate care, and the old patriarchal system is made to fit in with modern conditions. The houses of the workers are very comfortable, and the spacious garden and grounds are tastefully laid out, full provision being made for all kinds of games and athletics. One of the buildings is used as a creche for the babies of working mothers, who follow their various occupations in the happy knowledge that their little ones are well taken care of during their absence. As the children grow up, they are educated in another building utilised as a school, which has in front a pleasant garden containing a tree planted by Sir Hugh Clifford when His Excellency paid a visit of inspection to the place in January, 1926. The children as they grow up are also trained to become experts in the particular branches of work for which they are selected according to their capacity and inclination. Properly equipped play-grounds for the juveniles, parallel bars and a volley ball court for the men, demonstrate the interest taken in the physical development of the labourers.

The head of this noteworthy business, Mr. H. L. De Mel, had been connected with it since 1900, when he joined his father and took over a share in its management, prior to which he had been practising as a lawyer. In 1908 he was elected member of the Municipal Council for the Slave Island Ward, and in 1909 he was elected member of the Board of Agriculture and the Ceylon Chamber of Commerce. In 1916 he was elected Chairman of the Low Country Products Association, having been its founder and Secretary for eight years previously. In recognition of the services he rendered during the War, he was made a Commander of the Most Excellent Order of the British Empire by his Majesty the King, being the first in Ceylon to receive that honour, and was also created a Chevallier de l'Ordre de la Couronne de Belgique by His Majesty the King of the Belgians. In 1920 Mr. De Mel was elected Member of the Reformed Legislative Council, re-

presenting the Low Country Products Association of Ceylon, and in 1921 he was Chairman of the Reception Committee of the Ceylon National Congress.

In conferring on him the highest local birthday honour—a Commission of the Peace for the Island of Ceylon—on June 3rd, 1917, His Excellency Sir John Anderson, then Governor of the island, said:

“On many occasions Government had to apply to you for advice and assistance, which were freely and promptly given, and never more so than at the present critical time.”

His public philanthropy and private generosity are well known, and he has done very much for local education. In 1925 he organised the work of a newly-constituted Committee on “Free Education” of the City's children, and has been elected its Chairman. In addition to the schools which he has on his estates and factories, there are six others managed by him, in which more than 3,000 children are educated free; and two other schools have recently been built in order to provide for some 10,000 children in the whole city.

When H.R.H. the Prince of Wales visited Ceylon in March, 1922, Mr. H. L. De Mel was the only Ceylonese Chairman of Committee, and successfully organised a pageant of 18,000 school children, who were drawn up on a length of a mile and a half right through the Cinnamon Gardens with only 500 Boy Scouts instead of the Police to maintain order.

Although Mr. De Mel has been a Member of the Chamber of Commerce for more than twenty years, he was the founder of the Ceylon Merchants' Chamber inaugurated in August, 1926. Thus a large number of local merchants were enabled to form themselves into a Chamber to safeguard and advance their own interests, which are not always identical with the interests served by the Ceylon Chamber of Commerce. Mr. De Mel was elected President for three years, and the offices of the new Chamber are also on the third floor of the De Mel Building.

There is no space here, however, to recount all the worthy things performed by this highly esteemed gentleman, but sufficient has doubtless been said to indicate the prominent and honoured position which he occupies. He is assisted in the management of his business by his son, Mr. R. F. S. De Mel, and the firm's reputation has been well maintained by their numerous managers and assistants who have grown grey in service.

Messrs. H. L. De Mel and Co.'s telegraphic address is “Elsmere,” Colombo, and the codes used by them are the A B C 5th and 6th editions, Bentley's, Western Union, and private. They are agents for the New India Assurance Co., Ltd., of Bombay, and Mr. George F. Pettinos, of Philadelphia (U.S.A.). They have also agencies at Antwerp, Hamburg, Bremen, Berlin, London, New York, Melbourne, Sydney, Calcutta, Bombay, Madras, Rangoon, Durban, and in Italy, Japan, and Java.

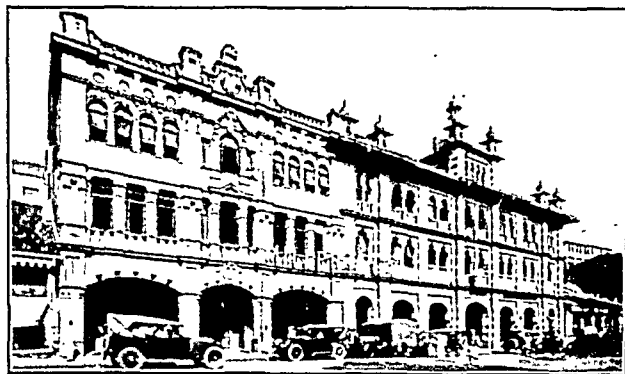
MILLER and CO., LTD., Wholesale and Retail Merchants and General Outfitters, York Street.

The number of department stores bearing the name of Miller throughout the British Empire is truly remarkable. The present writer has described dozens of them, including one giving employment to 5,000 persons. There must be something that makes for expansiveness in the Miller psychology, something that finds its best expression in large business undertakings, in supplies of the most necessitous materials, and in that highest of all ideals, service, which is the import of all the creeds. What could be more indispensable, for instance, than food, clothes, and medicines, to say nothing of the infinity of other things necessitated by the ever-growing comprehensive department store in Colombo's chief shopping thoroughfare. General department stores are, as a rule, very much alike in organisation and goods. The one under notice differs by reason of the fact that, although displaying the most comprehensive stock, there is a specialisation in certain departments that raises them above plexity of modern life! The business of Messrs. Miller and Co., Ltd., has been highly appreciated for its service and supplies in that connection for upwards of seventy years; so that there are very good reasons for the continual ingress and egress of customers through the many doors of their the level of ordinary achievement, and has earned for the firm a reputation peculiarly their own throughout Ceylon. In no direction, for instance, is this more in evidence than in the one for things eatable and drinkable, that so well upholds the name of Messrs. Miller and Co., Ltd., in homes all over the island. An inspection of its interesting assortments provides an object lesson in the enormous range of modern preserved foods. By means of these numerous choice comestibles it is easy to impart to the daily fare of the ordinary home that piquancy and variety which whet jaded appetites and create delightful surprises and uncertainty as to what is to be served. The groceries and provisions obtainable from Messrs. Miller and Co., Ltd., enable their many customers to solve most pleasingly and economically the domestic problems regarding meals which confront every home where good and varied food is a matter of primary importance. Fresh fruits and vegetables, and confectionery put up in new and alluring ways, are included in the comprehensive supplies. The facilities thus provided by Messrs. Miller and Co., Ltd., are greatly appreciated when occasions arise for special additions to the daily bill of fare; and many a dinner that would otherwise be in the category of mediocrity, is raised to the superlative by the choice dainties in question.

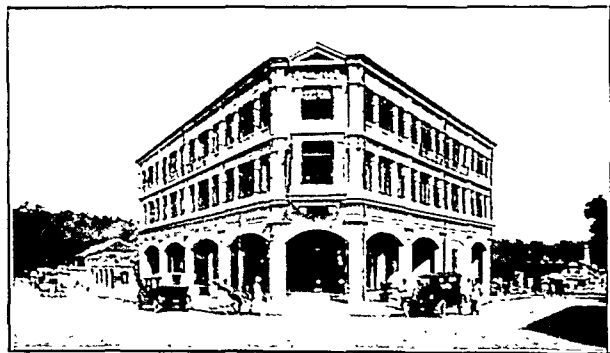
Similar encomiums are applicable to the firm's exhaustive selections of wines and spirits, which embrace a large proportion of the best-known brands on the market. The firm import much of their liquor in bulk, and consequently their bottling department in Dawson Street is a busy and important place.

Another department in which Messrs. Miller and Co., Ltd., excel is the one for drugs, medicines, and toilet articles, where the best pharmaceutical traditions are exemplified in all those details that are inseparably associated with high-class pharmacies in Great Britain.

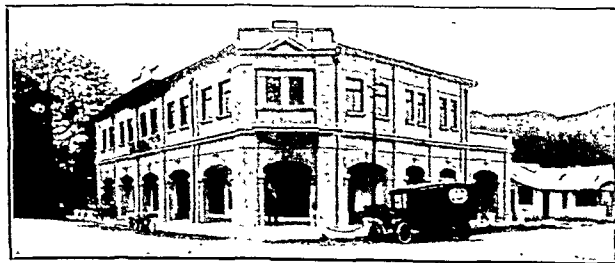
As exponents of the latest styles in ladies' and gentlemen's outfitting, Messrs. Miller and Co.,



PREMISES OF MILLER and CO., LTD., COLOMBO.



KANDY BRANCH OF MILLER and CO., LTD.



NUWARA ELIYA BRANCH OF
MILLER and CO., LTD.

Ltd., are similarly popular and influential, and in the tailoring, dressmaking, and millinery departments are employed experts whose clever interpretation of fashion and fit takes cognizance of the ever-varying idiosyncrasies of individual requirements in all that relates to accuracy of measurement, suitability of material, chromatic harmony, and good taste.

Much could be written regarding the departments for tobaccoists' supplies, glassware,

crocery, and household requisites of every description, watches, clocks and jewellery, gramophones, photographic materials, sports goods, etc. But to describe these even briefly would entail more inches than there are pages at our disposal.

The history of the concern goes back to the early fifties of last century, when Mr. Cramond Miller started at Kandy a small business in general merchandise, which later became known as Bell, Miller, and Co. In 1858 that name was changed to Findlay, Miller and Co., and in 1862 it became Miller and Co., which continued until 1921, when the firm was incorporated as a private limited lia-

bility company. The business now gives employment to about 600 persons; and to its very successful development no one has contributed more than Mr. W. Philps, the former managing director, who retired in 1926 after 36 years' service. Messrs. Miller and Co., Ltd., have other large stores at Kandy, Nuwara Eliya, and Bandarawella, also forage mills and warehouses in Dawson Street, Colombo. The company's cable address is "Millers," Colombo, and the codes used by them are Western Union (five letter), A B C 5th edition, and Bentley's.

HEATH and CO., Exporters of Tea, 9, Park Street.

THE famous tea of Ceylon is tested, blended, graded, and packed for shipment abroad in the premises of Messrs. Heath and Co. at 9, Park Street by methods representing all the knowledge and experience that have evolved for the perfection of process and result in that connection. Ceylon tea varies considerably in flavour, according to the elevation and district in which the estate is situated. Teas from the estates in the low country have practically no distinctive flavour; while a choice flavour is produced by estates of medium elevation; and a very choice lemon flavour is characteristic of tea grown in certain areas and in districts over 6,000 feet above sea level.

After the tea has been graded each grade is packed separately in wooden boxes lined with sheet lead and carefully soldered, for it is of the utmost importance that the package should be as air-tight as possible, since tea is exceedingly quick in absorbing moisture from the air, and then becomes rapidly mouldy and useless. Before packing, each grade of tea is always fired at a temperature round about 180 deg. Fahr. The tea is then graded and packed.

Messrs. Heath and Co. are one of the best-known firms in the tea trade, and are shippers of tea to Australia, Canada, United States, Great Britain, and other parts of the world. Their business was started in January, 1862, by Mr. Rodewald, who was subsequently joined by Mr. A. H. Heath, and the firm then became known as Rodewald and Heath. With the expansion of the tea trade in India and Ceylon, the firm opened branches there, the Colombo branch being established in 1896 and the one at Calcutta in 1904; while an office was also established at Batavia, Java, in 1920. In 1900 Mr. Rodewald retired. The business was then transferred to Messrs. A. H. Heath and A. R. A. Heath, and has since been carried on under the name of Heath and Co. The partners now are Messrs. A. R. A. Heath, G. L. Lyon, and C. H. Griggs. Messrs. Heath and Co. are agents for the China Fire Insurance Co., Ltd., incorporated in Hong-kong. Their telegraphic addresses are "Heather," Colombo; "Heathbird," Calcutta; and "Heather," Batavia. The codes used are the A B C 4th, 5th, and 6th editions, Lieber's, and private.

LEE, HEDGES and CO., LTD., Import and Export Merchants, Estate, Shipping, Insurance and General Commission Agents, Colpetty.

UNLIKE many other seaports in the East where firms come and go with astonishing rapidity, Colombo's commercial community comprises quite a number of fine old houses that have been established for many decades. Amongst these are Messrs. Lee, Hedges and Co., Ltd., whose name is honourable and prominent in local commercial records since 1858, when the firm was founded, and when merchandise to and from Ceylon was carried in sailing ships round the Cape of Good Hope. Messrs. Lee, Hedges and Co., Ltd., used to be amongst the largest exporters of Ceylon coffee, and after the failure of that industry in 1876 turned their attention to its successor, tea, in which they were one of the pioneer firms and helped considerably in making that fragrant product of the island famous throughout the world. Their trade in tea is very extensive, as is well evidenced by the interesting sights in that

connection to be witnessed at their new premises in Colpetty, where every existent condition is the result of careful study and long experience of the best ways and means for the reception, preparation and shipment of the commodity.

Messrs. Lee, Hedges and Co., Ltd., have always had their stores at Colpetty, but it was only recently that they removed their offices to that admirable district from 55-57, Queen Street, where they had been for many years. The premises in Colpetty are about five acres in area, and on the top floor of one of the new buildings, covering 36,000 square feet, are the clerical departments, where much valuable time is now saved that was formerly wasted through the separation of offices and works so far distant from each other. Besides tea, Messrs. Lee, Hedges and Co., Ltd., are also amongst the largest exporters of cinnamon, rubber and coconut products, etc.

They transact likewise an extensive trade as general importers, more especially of teak and other foreign timber, momi chests, building materials, estates' requisites, explosives, cartridges, etc. The directors are Messrs. A. S. Berwick, A. P. Waldoek, C. S. Burns, J. M. Pittendrigh and J. W. Oldfield. The firm's telegraphic address is "Hedges," Colombo, and they use all the standard codes. They are agents for the following :—

Grace Bros. & Co., Ltd., London, Liverpool, Manchester, Genoa, etc.
W. R. Grace & Co., New York, San Francisco, Chicago, Seattle, Panama, Valparaiso, Lima, etc.
Grace and Co., Ltd., Montreal, Kingston, Jamaica, etc.

FOR SHIPPING :

Dollar Steamship Lines, Ltd.
New York and Pacific S.S. Co., Ltd.
Atlantic and Pacific S.S. Co., Ltd.
Grace Steamship Co., Ltd.
Societa Nazionale di Navigazione.
The Standard S.S. Owners' Protection and Indemnity Association, Ltd.

WALKER and GREIG, LTD., General Engineers, Slave Island

ALTHOUGH the premises of Messrs. Walker and Greig, Ltd., occupy an area of about five acres in the centre of Colombo, they are hidden in a secluded district beside the lake, and, therefore, are not likely to be noticed by the stranger making a brief and unaided tour of inspection of the city and its environs. In that important establishment hundreds of skilled workmen, supervised by European experts, are engaged in the wide range of general engineering for which Messrs. Walker and Greig, Ltd., are famous, especially in those phases of it pertaining to the manufacture, installation, and repair of machinery for the various agricultural industries of the island. Owing to the continual development of the business, the firm's Slave Island premises, to which allusion has just been made, have become inadequate for the demands made upon them, and accordingly Messrs. Walker and Greig, Ltd., are building larger and better premises on the other side of the lake. Their wood-working plant has already, at the time of writing, been transferred into the new works; and when the entire transference will be completed, it will inaugurate a new era of progress and expansion for the firm, and enable them, by their greatly increased facilities and resources, to demonstrate even more impressively than before their capacity for the fulfilment of big contracts for the remodeling of all kinds of plants and the erection of all kinds of buildings.

Messrs. Walker and Greig, Ltd., specialise in the manufacture and installation of machinery for tea and rubber factories.

The business is one of the oldest industrial undertakings in Ceylon, and was founded by Mr. John Walker, who arrived in the island in 1836 for the purpose of erecting sugar machinery for Messrs. James Finlay and Co. Thereafter he started operations as a general engineer on his own account at Kandy, and was very successful.

FOR INSURANCE:

The Commercial Union Assurance Co., Ltd., Fire, Life, Marine and Accident Guarantee and Motor Car Insurances.
Union Insurance Society of Canton, Ltd.
Underwriters at Lloyds.
Imperial Live Stock and General Insurance Co., Ltd.
The Gripoly Belting Co.
The Morgan Crucible Co., Ltd.
Curtis's and Harvey, Ltd., London.
The State Saw Mills, Government of Western Australia.
The Atlas Preservatives Co., Ltd.
Bells United Asbestos (India), Ltd.
Sumner's Ty-phoo Tea, Ltd.

AGENTS & SECRETARIES FOR:

The Kanapediwattie Tea Co., Ltd.
The Vogan Tea Co. of Ceylon, Ltd.
The Lanka Rubber Co., Ltd.
The Pelmadulla Valley Tea & Rubber Co., Ltd.
The Honiton Rubber Co., Ltd.
The Mirishena (Kalutara) Rubber Co., Ltd.
The Kandy Rubber and Tea Co., Ltd.
The Hatton Tea Co., Ltd.
The Alpitakarde Tea & Rubber Co., Ltd.

At that time the cultivation of coffee was the principal agricultural industry, and Mr. John Walker's coffee pulping machine was one of the most popular and best known contrivances of the kind then in use. Mr. John Walker was essentially an engineer. In order that he might have an absolutely reliable person to look after the commercial side of his business, he sent for his brother William, and together they carried on the concern from 1854 as John Walker and Co. Advancing with the times, and to meet the requirements of the coffee planters of Uva, Mr. John Walker opened at Badulla and Haldummulla branches under the style of Walker and Wilson, which was changed in 1874 to Walker and Greig. With the growing importance of Haputale, the old workshop at Haldummulla was closed, and a new one opened at the top of the pass, where the business was carried on, the firm eventually removing into their present premises at Haputale. Badulla workshop likewise underwent reconstruction, and is now an imposing establishment.

About the year 1873 the head office (John Walker and Co.) at Kandy started a branch in the Dikoya district in a small store close to the firm's present well-stocked premises at Glencairn, also a branch at Craiglea, Dimbula, which they took over from Messrs. Lee, Hedges and Co. About the same time they started building a store at Tillicoultry, Lindula, and in 1876 took over the business of Gordon, Massie and Co., at Devon, Dimbula, and Agrakande, Lindula, transferring the Craiglea store to and incorporating it with that at Devon. In the early eighties Mr. John Walker retired from the firm of John Walker and Co., taking over the various up-country businesses, and—leaving Kandy to his brother William—carried them on under the style of Walker and Greig. With the death of Mr. John Walker in 1890, the concern passed into the care of trustees, and was

eventually managed and bought from the trustees by Mr. John Walker, son of the founder of the firm.

In 1910 the firm was incorporated with a capital of Rs. 1,500,000, and the new company, still retaining the up-country establishments, opened the works in Slave Island, Colombo, already referred to.

The telegraphic address of Messrs. Walker and Greig, Ltd., is "Reklaw," Colombo, and the codes used are Bentley's, A B C 5th and 6th editions, Marconi's, etc. Messrs. Walker and Greig, Ltd., are agents for the following:—

Gandy's Belting Co., Ltd.

J. M. Henderson & Co., Aerial Ropeways.

Allan, Whyte & Co., Wire Ropes and Shoots.

John Yates, Estates Tools.

Carron Iron Works.

Stratheyldes Paint Co., Ltd.

Adolphe Crosbie, Ltd.

W. Gunther & Sons.

Martin Earle & Co., Ltd., Cement.

Dennis Lorries.

Planters Engineering Co., Ltd.; Rubber Mills and Gass's Back Washers.

Darlaston Galvanizing Co., Ltd.

Norris Henty & Gardner, Ltd., Gardner Engines.

Ruston & Hornsby, Lincoln, Gas Engines.

Hans Renold, Chain Transmission.

Hele-Shaw Oil-Hydraulic Transmission.

Flux Pump Co.

THE CEYLON WHARFAGE COMPANY, LTD.

THE Ceylon Wharfage Co., Ltd., was formed in 1899 for the purpose of taking over and extending the old-established business of the Wharf and Warehouse Co., Ltd., founded in 1875. The company at its inception leased from Government a large part of the Customs premises, to which it has since made many improvements, both as regards facilities for landing and delivering cargo and in increased warehouse accommodation. In 1899 all rice and bag cargo was landed at an extensive sandy beach by coolies wading into the water and bringing the bags to shore on their heads. All that has now been changed, and quay walls having been built, the former sandy beach has been transformed into a miniature wet-dock, well supplied with travelling steam-cranes and all appliances for the rapid handling of cargo. Large additions have also been made to the company's fleet of cargo, coal, and water lighters. The total tonnage of the fleet of lighters is already close on 20,000 tons. For the rapid movement of this fleet the company owns nine tugs of the latest design. The tonnage of the water fleet amounts to an aggregate of 2,100 tons, with ten steam pumps and boilers. For the upkeep of this fleet there are two yards, one—the building yard—on the Kelani River, and the other—the repairing yard—on the north-

east side of the harbour. At the latter point the company has several patent slips for convenience in the repair of its tugs and barges.

The company lands and ships all coal for the P. and O. Co., British India Steam Navigation Co., and the Messageries Maritimes Cie., and handles annually on an average three quarters of the trade of the port.

The company is also the cargo-landing and boating contractor for the P. and O., British India, Orient Royal Mail, Bibby Line, Harrison Line, Messageries Maritimes, Asiatic S. N. Co., Nippon Yusen Kaisha, Clan Line, City Line, Holt Line, Anchor Line, and others; and it ships cargo to every steamer line entering Colombo. This large undertaking necessitates, of course, a big labour force, and it is estimated that the company controls a staff of about 5,000 men.

The manager at Colombo is Mr. W. Y. Fleming. The head office of the company is at 9, Throgmorton Avenue, London, E.C. The chairman is the Right Hon. the Viscount Inchcape; the managing director is Mr. James A. Ridge. The other directors are Mr. Edwin Darlington, C.I.E., Commander August B. T. Cayzer, R.N., Mr. Alfred Geoffrey Turner, and Sir Kenneth Anderson, Bart., G.C.M.G.

BOIS BROS. and CO., LTD., Estate Agents, Merchants, and Financial Agents, Queen Street.

THE business of Messrs. Bois Bros. and Co., Ltd., was established in 1891 by Mr. (later Sir) Stanley Bois and his brother Percy, both of whom had been engaged with the now defunct firm of Alston, Scott, and Co. for many years. Amongst the first agencies held by Messrs. Bois Bros. and Co. was that of the British India Steam Navigation Co., which developed very greatly with the growth of the port of Colombo; so much so that at last that company opened its own office there.

Sir Stanley Bois was very influential in the public life of Ceylon, and was knighted for his services in that connection. He was a member of the Legislative Council, Colombo Municipal Council, Chairman of the Chamber of Commerce,

and Commissioner of the Ceylon Exhibition at the St. Louis Exhibition. He and his brother Percy are now resident near London; but Sir Stanley is still intimately connected with the Colombo firm bearing their name, which was formed in 1920 into a limited liability company, of which the present directors are Messrs. G. C. Slater, Neill G. Campbell, and L. G. Byatt.

Messrs. Bois Bros. and Co., Ltd., have at Colombo very large warehouses, where tea, rubber, cocoa, and the other products of the island are prepared for shipment to all parts of the world. The firm's telegraphic address is "Boisdale," Colombo, and the codes used are

Marconi, Bentley's, A B C 6th edition, and private. They are agents for the following:—

The Anglo-Ceylon & General Estates Co., Ltd., 20, Eastcheap, London, E.C.

Robertson, Bois & Co., 12, Fenchurch Street, London, E.C.

M. P. Evans & Co., 30, Mincing Lane, London, E.C.

INSURANCE:

The Standard Life Assurance Co. (Life).

The Alliance Assurance Co. (Fire, Marine, Motor Car, and Burglary).

The Royal Exchange Assurance Corporation (Marine).

SHIPPING:

Struthers & Barry.

Managing Agents, U.S. Shipping Board E.F. Corp.

STERLING COMPANIES:

The Anglo-Ceylon & General Estates Co., Ltd.

The Ceylon Upcountry Tea Estates, Ltd.

The Ceylon Timber & Rubber Syndicate, Ltd.

The Craighead Tea Co., Ltd.

The East India & Ceylon Tea Co., Ltd., London, E.C.

The Hanuwella Rubber Estates, Ltd.

The Lindoola Tea Co., Ltd.

The Tyspane Tea Co., Ltd.

The Vellikellie Tea Co., Ltd.

AGENTS AND SECRETARIES (RUPEE COMPANIES):

The Aphorpe Estates, Ltd.

The Ceylon & Eastern Investments, Ltd.

The Eastern River Tanneries Co., Ltd.

The Jambulande Tea & Rubber Estates, Ltd.

The Kaluganga Valley Tea & Rubber Co., Ltd.

The Katiapola Rubber Co., Ltd.

The "L. L. P." Estates, Ltd.

The Macaldeniya Tea & Rubber Co., Ltd.

The Morakelle Rubber Co., Ltd.

The Mulhalkelle Tea Co., Ltd.

The New Colombo Ice Co., Ltd.

The Oaklands Tea & Rubber Co., Ltd.

The Palmerston Tea Co., Ltd.

The Roeberry Tea Co. of Ceylon, Ltd.

The Rubber Plantations of Kalutara, Ltd.

The S. Helier's Tea Co., Ltd.

CORRESPONDENTS FOR:

Charles Lane & Sons, 7-8, Idol Lane, London, E.C.

Drexel & Co.

Hasler & Jaeger, 21, Mincing Lane, London, E.C.

Morgan, Glenfell & Co.

Morgan, Harjes & Co.

Rownson, Drew & Clydesdale, Ltd., 225, Upper

Thames Street, London, E.C.4.

Scott & Co., Mauritius.

NEW COLOMBO ICE COMPANY, LTD., Glennie Street, Slave Island.

THE word new in the name of a business undertaking, like the one indicated above, suggests improvement upon what that concern had formerly been or had attained. The records of the preceding Colombo Ice Co., Ltd., include nothing out of the ordinary. It had been established for many years and went into liquidation. Such is its brief, bald history. But from it arose, Phoenix-like, a totally different company; and in order that its greatly improved character should be proclaimed, the word New was added to the former title. Thus in 1920 the New Colombo Ice Co., Ltd., began to serve the people of Colombo and elsewhere in new ways of efficiency that made them "sit up and take notice."

In Colombo the famous foreign aerated waters are expensive; and so residents in Ceylon's capital and visitors to it were agreeably surprised when they found that the Elephant brand of non-alcoholic beverages of the New Colombo Ice Co., Ltd., compared favourably with the foreign waters and were procurable at much less cost. The New Colombo Ice Co., Ltd., has proved the fallacy of ginger beer in stone bottles, which has always been regarded as the slogan of correct preferment in that connection. Fearful things creep into stone bottles, and remain there undetected in death, however great care may be exercised in prevention. Clear glass bottles are not suitable for ginger beer, as the sunlight deteriorates the contents considerably. The ginger beer of the New Colombo Ice Co., Ltd., is always in amber glass bottles; and the insides of all the bottles are subjected to minute scrutiny before and after being filled.

The new methods of washing the bottles are amongst the most outstanding characteristics of the work done in the busy Elephant Brand factory. After the bottles receive their preliminary washing they pass through the new Dawson Patent

Washer, where the insides are scoured with great force by jets of alternating caustic soda and hot and cold water, this being an improvement upon the method of revolving spiral brushes which has hitherto been regarded as the most effective system.

The department for the mixing of the sugar and flavouring essences affords, with its fly-proof and dust-proof arrangements, impressive demonstrations of the care exercised by the company in regard to safeguarding the absolute purity of the materials from any possible contamination, as well as in ensuring absolute accuracy and uniformity in the quality of the finished products. The boiling of sugar, as is frequently adopted in other aerated water factories, is, through crystallization tendencies, apt to lead to injurious effects in the manufactures. Accordingly in the factory in question the pure cane sugar used is made soluble by what is known as "the cold process," and is filtered through paper pulp, when its purity is attested by the fact that it is almost without colour, like water. The flavouring fruit syrups and essences are then added by ingenious contrivances that operate with automatic precision in determining the amount necessary for each particular beverage; and the mixtures are conveyed through pure tin pipes to a remarkable aluminium filler which inserts the mixtures and their specified quantities into the bottles. The latter are thereafter conveyed by machinery to the bottling apparatus, which adds to their contents the twice-filtered water and carbonic acid gas. The bottles are then crown corked and labelled, and pass on to the storage departments, whence they go in thousands of dozens daily to gladden thirsty people throughout Ceylon. The factory is permeated by an ingenious transit system of gravity tramways, on which are conveyed in continuous succession the bottles as they pass through the

evolution that commences with their cleansing and ends with their completed contents ready for the market.

As its name indicates, the New Colombo Ice Co., Ltd., is primarily engaged in the manufacture of ice, of which it turns out about thirty tons daily, and supplies almost all the shipping visiting Colombo. The ground occupied by the company is about 2 acres, and it gives employment to about 200 persons. For its deliveries it has 14 motor lorries and 40 bullock carts.

HENDERSON and CO., Export Merchants and

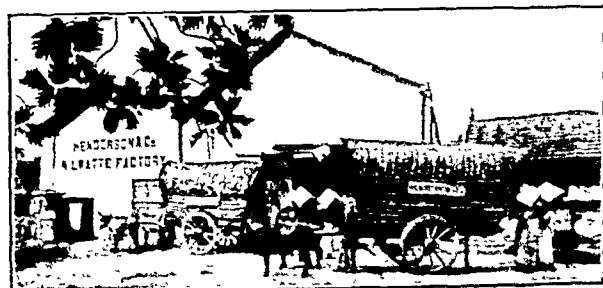
In no country in the world is more tea consumed in proportion to its inhabitants than Australia, and Messrs. Henderson and Co. were amongst the earliest and most influential pioneers in introducing and popularising Ceylon tea throughout that country. Their name is well known in tea circles all over the world; and while exporting Ceylon tea very extensively they are even still larger shippers of India and Java tea. Nowhere



TEA TASTING DEPARTMENT.



PACKING DEPARTMENT.



DESPATCHING THE TEA.

SCENES AT HENDERSON and CO.'S, NILWATTE FACTORY, COLOMBO.

Arrangements are now being made for rebuilding the factory on a much larger scale and for the addition to it of large cold-storage chambers. The managing director is Mr. G. C. Slater, who is also general manager of Bois Bros. and Co., described in the preceding article. The other directors are Messrs. A. R. Quarme, D. Julius, and E. W. Keith. The general manager is Mr. C. McMillan Mathieson. The company's telegraphic address is "Zero," and Bentley's code is used.

General Commission Agents, 19, Queen Street.

is tea more carefully and scientifically prepared for export than in Messrs. Henderson and Co.'s factories in Foster Lane and Colpetty, Colombo, where several hundreds of people are employed. The equipment of these establishments represents everything that experience can suggest for the enhancement of the work done there. The manner in which the packets of tea of different sizes are put up with labels of variegated designs is an object lesson in the efficiency which has been attained in connection with that class of operation. Messrs. Henderson and Co. have also done very much in the development of the rubber and coconut industries of Ceylon, and are large exporters of all the agricultural products of the island.

The history of the concern dates back to the early eighties of last century, when Mr. J. A. Henderson and Mr. H. Tarrant, both previously engaged in the wholesale tea trade in London, commenced business in partnership under the name of Tarrant, Henderson and Co.; but in 1896 the partnership was dissolved, and Mr. Henderson continued business on his own account under the name of Henderson and Co., every year showing a development in his trade. Mr. Henderson attends to the firm's interests at the London buying office in "Ocean House," 24/5, Great Tower Street, E.C.3. The other partners are Messrs. H. J. Hanscomb and G. K. Logan, who reside at Colombo.

Messrs. Henderson and Co.'s telegraphic address is "Quality," and they use all the standard codes. They are agents for the following:

- The Dalkeith (Ceylon) Rubber Estates, Ltd.
- Pindenioya Rubber & Tea Estates, Ltd.
- Allerton Estates (Ceylon), Ltd.
- Kudaganga Rubber Co. of Ceylon, Ltd.
- Walagama Rubber Co., Ltd.
- Balahela Rubber Co.
- Trafford Hill Rubber Estates, Ltd.
- Hangranoya Tea Estates, Ltd.
- Richlands Ceylon Tea Estates, Ltd.
- The Kirivaula Coconut Plantation Co., Ltd.
- Tilton (Ceylon) Tea Estates, Ltd.
- Danzil Estates Co., Ltd.
- The Union Marine Insurance Co., Ltd.
- The State Assurance Co., Ltd.
- The Western Assurance Co.
- The Queensland Insurance Co., Ltd.
- The Phoenix Assurance Co., Ltd.
- Lloyd's Underwriters.
- The Nilwatte Tea Packeting and Packing Factory,

WHITTALL and CO.,**General Merchants, Shipping, Insurance, and Estates Agents, 14, Queen Street.**

The prominence of Messrs. Whittall and Co. in local trade is well demonstrated by their mills and warehouses, occupying about four acres at Mortlake, Slave Island, and giving employment to some hundreds of persons. From these premises are shipped large quantities of the products of Ceylon, especially tea and rubber.

The tea departments are particularly interesting. The firm's tea tasters, like those in the other similar establishments in Colombo, have to taste from 1,000 to 2,000 teas every week. In the tasting of the tea a weight of tea equal to a six-penny piece is dropped into a small pot, and about an eighth of a pint of boiling water is poured thereon. The lid is then placed on the top of the pot, and after standing from five to six minutes all the liquid is poured into a small china bowl of suitable size. The infused leaves are tapped from the pot on to the lid, which is inverted for that purpose. The taster then starts his examination, testing the tea first by the liquor, next by the scent or brightness of the infused leaf, and finally by the appearance of the dry leaf of the sample, forming his opinion by the combination of the points noticed. Ceylon tea varies considerably in flavour according to the elevation and district in which the estate is situated. Teas from the estates in the low country have practically no distinctive flavour; while a choice flavour is produced by estates of medium elevation, and a very choice lemon flavour is characteristic of tea grown in certain areas and in districts more than 6,000 feet above sea level.

The tea, after being graded is packed in the familiar lead-foil packages and loose in wooden boxes lined with sheet lead hermetically soldered; for it is of the utmost importance that each package should be as air tight as possible, as tea is exceedingly quick in absorbing moisture from the air (up to 16 to 17 per cent.) and then becomes rapidly mouldy and useless.

Messrs. Whittall and Co.'s premises include their own printing plant for labels, stationery, etc.

The firm not only sell the products of the various tea and rubber companies for whom they are agents, as detailed at the end of this sketch, but they also buy for them the comprehensive range of articles comprised by the term of "estates supplies," including large quantities of rice and other foodstuffs.

The business of Messrs. Whittall and Co. was established in 1859 at Kandy under the name of Keir, Dundas and Co., which was continued until 1873 when the firm moved to Colombo and became known as Duncan Anderson and Co. In 1880 the present title was assumed.

It is worthy of note that Mr. G. W. Carlyon, one of the former partners in the firm, introduced

about 1890 the first ricksha into Ceylon. Mr. Carlyon retired in 1906, but the puller of the historic little vehicle remained a pensioner of the firm until his death in 1924.

The present partners are Mr. C. H. Figg, Sir James T. Broom, Mr. A. S. Collett, and Mr. P. H. Fraser. Messrs. Whittall and Co.'s telegraphic address is "Whittall," Colombo, and they use all the standard codes. They are Agents and Secretaries for (Rupee Companies)

The Agra Ouvah Estates Co., Ltd.
 The Clunes Estates Co. of Ceylon, Ltd.
 The Coconut Estates of Perak, Ltd.
 The Colombo Fort Land and Building Co., Ltd.
 The Dorset Rubber Estate Co., Ltd.
 The Drayton (Ceylon) Estates Co., Ltd.
 The Estates Co. of Uva, Ltd.
 The Fernlands Tea Co., Ltd.
 The Glasgow Estate Co., Ltd.
 The Colinda Tea & Rubber Co., Ltd.
 The Hatbawe Rubber Co., Ltd.
 The High Forests Estate Co., Ltd.
 The Kalutara Co., Ltd.
 The Kanana Rubber Estate Co., Ltd.
 The Lady Havelock Gardens Co., Ltd.
 The Maha Uva Estate Co., Ltd.
 The Niriwatte Co., Ltd.
 The Oonogaloya Tea Co., Ltd.
 The Pimbura Rubber Co., Ltd.
 The Ruanwella Tea Co., Ltd.
 The Sunderland (Ceylon) Rubber Co., Ltd.
 The Telok Bharu Coconut Co., Ltd.
 The Torrington Tea Estates, Ltd.
 The Uplands Tea Estates of Ceylon, Ltd.
 The Upper Maskeliya Estates Co., Ltd.
 The Vincit Tea and Rubber Co., Ltd.

AGENTS FOR (STERLING COMPANIES):

The Alliance Tea Co. of Ceylon, Ltd.
 The Balmoral (Ceylon) Estates Co., Ltd.
 The Bandarapola Ceylon Tea Co., Ltd.
 The Bibile Rubber Co., Ltd.
 The Demodera Tea Co., Ltd.
 The Ganapalia Estate Co., Ltd.
 The Haydella Tea & Rubber Estates, Ltd.
 The Imperial Ceylon Tea Estates, Ltd.
 The Kobonella Estates Co. of Ceylon, Ltd.
 The Mazawatte Tea Co., Ltd. Densham & Sons, Ltd.).
 The Seremban Rubber Estates, Ltd.
MANAGING AGENTS FOR (STERLING COMPANIES):
 The Panawatte Tea & Rubber Estates, Ltd.
 The Yatiyantota Ceylon Tea Co., Ltd.

AGENTS FOR:

The Yorkshire Insurance Co., Ltd. (Fire and Marine).
 The Northern Assurance Co., Ltd. (Fire & Burglary).
 Hongkong Fire Insurance Co., Ltd.
 London Guarantee & Accident Co., Ltd. (Fidelity Guarantee, Motor Car, Motor Cycle, and Vehicle Insurance).
 Canton Insurance Office, Ltd. (Marine).
 Northern China Insurance Co., Ltd. (Fire and Marine).
 Triton Insurance Co., Ltd. (Fire).
 Eagle, Star & British Dominions Insurance Co. (Fire, Loss of Profit, Marine and Baggage).
 The Orient Line.
 The Glen Line.
 The Dollar Line.
 The Admiral Oriental Line.

JAMES FINLAY and CO., LTD.,
General Merchants and Commission Agents, 63, Queen Street.

THE fine old block of office buildings on the left side of Queen Street, looking from the lighthouse towards Galle Face, is practically as it was many decades ago, and has housed some of the principal firms in Colombo for generations. But no concern there is comparable in history and achievements with that of Messrs. James Finlay and Co., Ltd., whose business, founded about 1750 in Glasgow, has contributed very considerably to the development of British trade, especially in the East. An account of it will be found on pages 60 and 61, in the section on Calcutta, in which city the firm have their headquarters for the Indian Empire.

At Colombo Messrs. James Finlay and Co., Ltd., are large exporters of all the products of Ceylon. Their Ambawatte Mills, in Vauxhall Street, occupy $5\frac{1}{2}$ acres, and are excellently equipped for their purpose. In that interesting establishment may be seen the famous tea of Ceylon undergoing the various operations preparatory to its being packed in the well-known "Acme" lead-lined tea chests for shipment to all parts of the world; also rubber, cinnamon, cocoa, desiccated coconut, etc. The firm are like-

wise extensive importers of piece-goods, sugar, rice, etc. Their telegraphic address at Colombo is "Mercator," and they are agents there for the following:

South British Insurance Co., Ltd.
 Royal Insurance Co., Ltd.
 National Insurance Co. of Great Britain, Ltd., Glasgow.
 United Insurance Co., Ltd., Sydney.
 Ulster Marine Insurance Co., Ltd.
 Morrison Pollexfen & Blair, Ltd.
 The Osaka Marine & Fire Insurance Co., Ltd.
 The Automobile Insurance Co. of Hartford, Conn.
 The Insurance Co. of North America.
 The Samarang Sea & Fire Insurance Co., Ltd.
 The Consolidated Tea & Lands Co., Ltd.
 The Amalgamated Tea Estates Co., Ltd.
 The Anglo-American Direct Tea Trading Co., Ltd.
 The Kanan Devan Hills Produce Co., Ltd.
 The Mahawale Rubber & Tea Co., Ltd.
 The Pelmadulla Rubber Co., Ltd.
 The Wellandura Tea & Rubber Co., Ltd.
 The Ceylon Land Development Co., Ltd.
 Clan Line Steamers, Ltd.
 Osaka Shoen Kaisha Line.
 Houston Line of Steamers.
 Wilson Line of Steamers.
 Scottish Shire Line of Steamers.
 C. & S. Popoff Freres, Moscow and London.

GRAND ORIENTAL HOTEL (COLOMBO HOTELS COMPANY, LTD.).

At no port in the East do more passengers land than at Colombo, and the many thousands who pass through there must carry away memories and impressions of the Grand Oriental Hotel, situated opposite to the landing jetty. It is a meeting place of the East and the West, a famous resort of passengers between Europe, Australia,

custom and necessity; while those on vacation from the lands of the East or South meet there in the happy abandon of rest from business and in full enjoyment of the holidays upon which they have entered.

The adjoining dining-room, with seating accommodation for 300 persons, is very ornate in its white and gold decorations, and is overlooked on three sides by balconies. One of these is pleasantly and attractively furnished as a reading and writing-room, and always contains the latest illustrated papers, etc., from Great Britain and elsewhere. The dining-room opens on the left-hand side into a charming old world garden with a well-kept lawn, tropical trees, plants, fountain, benches, etc. At one end of the garden is St. Peter's Church, which used to be the residence of the Governor of Ceylon before the island passed from the possession of the Dutch in 1796; and the old garden was then part of the Residency grounds.

Many of the hotel bedrooms look into this delightful garden, and those on the upper floors command a beautiful view of the sea and the shipping entering and leaving Colombo harbour. The hotel has 220 bedrooms, and they are all nicely and suitably furnished. Each has its own large overhead electric fan and washbasin with hot and cold running water. Many of the apartments have their own bathrooms attached, and include also suites fulfilling all requirements.

The G. O. H., as it is popularly called, has recently undergone very extensive additions and



GRAND ORIENTAL HOTEL.

and the diverse countries of the Orient. The many signatures in its guest book present as varied caligraphy and nomenclature as may be found anywhere, and include the names of celebrities in all walks of life. The extensive lounge hall is equipped, as are all the other public sections, with overhead electric fans and comfortable chairs, settees, tables, etc., for *dolce far niente*. In that spacious place the people en route from home to the ports farther on get their first impressions of Oriental hotel service and the various much appreciated ice-cold beverages of tropical

improvements with special regard to the maximum of comfort, convenience, and adaptability to tropical conditions. The new entrance hall is exceptionally handsome, and over it on the first floor is the beautiful new ballroom equipped with projecting coloured lighting arrangements. Overlooking the entrance hall is a round gallery on each floor, and the great unobstructed space thus created, extending from the ground floor to the distant roof with its artistic coloured glass, contributes very much to the coolness and airiness as well as impressive appearance of the internal ensemble.

No feature of the G.O.H. is more noteworthy than its splendid roof garden, whence a memorable view is obtained of the city and the sea. In that cool and lofty rendezvous cinema displays are given on Wednesday and Sunday nights.

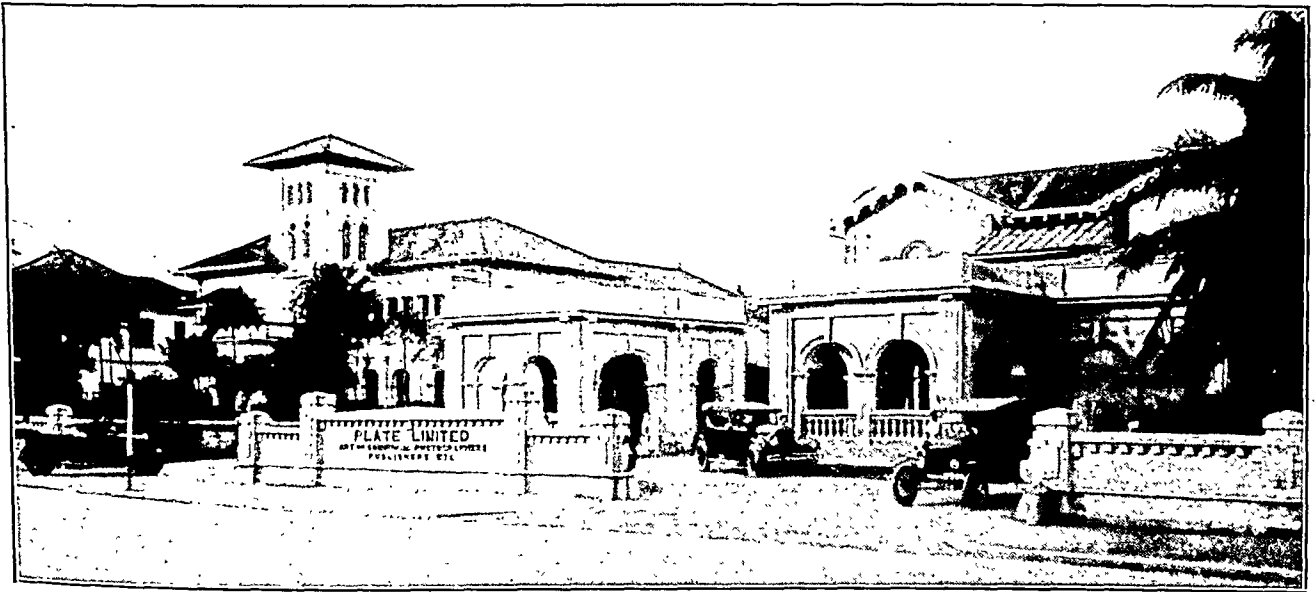
PLÂTÉ, LTD., Photographers, Publishers, Booksellers, Art House Decorators, etc., Colpetty.

By no firm in the East is the art of photography in all its branches more efficiently demonstrated than by Messrs. Plâté, Ltd., whose Colpetty premises, originally a private residence, have been gradually enlarged and adapted to the require-

The G. O. H. has its own ice factory and all modern conveniences, such as billiard room, electric elevators, hair-dressing saloon, and telephones on each floor with unrestricted connection throughout Ceylon.

The hotel was started in 1870 on a small scale, and has evolved to its present extent with the great development of Colombo as one of the chief ports of call in the world. The establishment is owned and operated by the Colombo Hotels Co., Ltd. The managing director is Mr. Thomas Walker, and the other directors are Messrs. S. P. Hayley, F. H. Layard, F. T. Wright, and Col. T. Y. Wright. The secretary is Mr. T. S. Rowe, and the manager Mr Frank Winfield. The telegraphic address is "Grand," Colombo, and the A B C code is used.

in depicting the best expression of their sitters in positions and poses best adapted to each individual seems to have behind them much psychological intuition, as well as very great experience of studio routine.



PREMISES OF PLÂTÉ, LTD., COLPETTY.

ments of the business, which now presents a very noteworthy combination of art and utility that has evolved as the natural outcome of the firm's continuous endeavour to exemplify the superlative in all their operations. The evolution through which photography has gone during recent years is amongst the wonders of modern science. The work of Messrs. Plâté, Ltd., in that connection can only be adequately realised by actual inspection of their processes and results. Their portraits, including those of Royalty and many celebrities throughout the world, are characterised by all the details inseparable from the highest phases of the art. The numerous examples of their ability

Specially noteworthy are the firm's beautiful enlargements and hand-coloured photographs, showing Nature's wealth of chromatic loveliness on land and sea. They have the largest selection in existence of photographs of all parts of Ceylon, and transact an important trade in commercial photographs of everykind. The supplies of Messrs. Plâté, Ltd., include everything for photography, and they are sole agents in Ceylon for Kodak, Ltd. They are also agents for the Autotype Fine Art Co., Ltd., London; The Platinotype Co.; Ross, Ltd., London; Ilford, Ltd., London; The Adhesive Dry Mounting Co.; The Autotype Co., London; W. W. Curtis, Ltd.; and Fine Art Printers, Coventry, England.

Messrs. Plâté, Ltd., recently turned their attention to the manufacture of motion pictures, and are now busily engaged in developing that branch of trade, which will include the production of films dealing with local history, folk-lore, customs and current events, etc.

The firm are likewise booksellers and publishers, and amongst their productions are the well-known *Plâté's Colombo Directory* and the popular book *Ceylon*, which deals in a very interesting and comprehensive manner with the island. At their Colpetty premises they have a circulating library containing more than 4,000 volumes.

Another very highly appreciated department of their business is the one devoted to all kinds of artistic house decorations. They are also manufacturers of furniture, and hold themselves in readiness at all times to submit designs for special requirements, or to carry out customers' own specifications in any class of wood work or upholstery. In that connection they are agents in Ceylon for Hall's Sanitary Washable Distemper and the "Keystone" oil paints. Their versatility in the manufacture of picture frames

of every description is the natural outcome of their photographic activities, and their stock of mouldings is well calculated to meet the most diverse needs. They have a department for printing, and are manufacturers of all kinds of illustration blocks.

The business was started in 1890 in a small studio at the Bristol Hotel by Mr. A. W. A. Plâté, who was joined in partnership soon afterwards by Mr. H. H. Heinemann. After the advent of the latter gentleman, it developed very rapidly, and when picture post-cards came into vogue, the firm began turning these out in enormous numbers as they still do. After the retirement of Mr. Plâté the firm was incorporated in 1900 with Mr. Heinemann as managing director, the other directors now being Mrs. Clara Plâté, E. J. Hayward, and C. W. Thompson. Branches of the business are established at Galle Face Hotel, Colombo, and at Kandy and Nuwara Eliya.

The company's telegraphic address is "Platwalk," and the codes used are the A B C 5th edition and Bentley's.

LEWIS BROWN and CO., LTD., General Merchants and Estate Agents, Prince Building, Prince Street.

A VERY great deal of the business activity in Colombo is carried on by firms operating as agents for the numerous tea, rubber, coconut, and other companies, whose properties are scattered throughout the island. One of the most prominent of these firms is that of Messrs. Lewis Brown and Co., Ltd., which was founded in the late seventies of last century by Mr. Robert Lewis Maitland Brown, who died in 1898. The firm was incorporated in 1916, and the directors are Messrs. Robert Davidson, David Scott, A. F. Patterson, and G. K. Stewart. Their telegraphic address is "Lewis," Colombo, and the codes used by them are The International Mercantile, Lieber's, A 1, A B C 5th and 6th editions, Western Union, Bentley's, and Broomhall's (Rubber edition).

Messrs. Lewis Brown and Co., Ltd., are agents and secretaries for the following:

- The Ceylon Ice & Cold Storage Co., Ltd.
- The Wanarajah Tea Co. of Ceylon, Ltd.
- The Ribu Rubber Co., Ltd.
- The Langat River (Selangor) Rubber Co., Ltd.
- The Ankande Estate Co. of Ceylon, Ltd.

- The Uva Rubber Co. of Ceylon, Ltd.
- The Monte Cristo (Ceylon) Tea & Rubber Co., Ltd.
- The Cocoawatte (Ceylon) Rubber & Tea Estates, Ltd.
- The Arcadia Coconut Estates, Ltd.
- Sir Harry Dias Coconut Estate, Ltd.
- The Hillwood Tea Co., Ltd.
- The Ragama Tea & Rubber Co., Ltd.
- Martin Coconut Estates of Chilaw, Ltd.
- The Nyanza Tea Co. of Ceylon, Ltd.
- The Burnside (Ceylon) Tea Estates, Ltd.
- Parkside (Neilgherry Hills) Estate Co., Ltd.
- The Ambalawa Estate Co. of Ceylon, Ltd.
- The Walakande Rubber Co., Ltd.
- Horrekelly Estate Co., Ltd.
- The Woodside Estates, Ltd.

AGENTS FOR:

- The Woodend (K.V. Ceylon) Rubber & Tea Co., Ltd.
- The Lochinagar (Ceylon) Produce Co., Ltd.
- The Neboda (Ceylon) Rubber & Tea Estates, Ltd.
- The Parambe Rubber & Tea Co. of Ceylon, Ltd.
- The Tismoda Estates Co., Ltd.
- The Galphele Tea & Rubber Estates, Ltd.
- The Ukuwela Estates Co., Ltd.
- The Aboyne Clyde Rubber Estates of Ceylon, Ltd.
- The Motor Union Insurance Co., Ltd.
- The Royal Insurance Co., Ltd.
- The Queensland Insurance Co., Ltd.
- Parry & Co., Madras.

FREUDENBERG and CO., Importers, Exporters and General Commission Agents, De Mel Building, Chatham Street.

THE business of Messrs. Freudenberg and Co. was established in 1873 by Mr. Phillip Freudenberg, who went to Ceylon to buy coffee and to develop direct trade between the island and the continent of Europe as the result of the new era of opportunity ushered in by the opening of the Suez Canal in 1869. When the coffee industry of Ceylon failed in 1876 Messrs. Freudenberg

and Co. turned their attention to its successor tea and the various other native products. As time passed their operations increased very considerably, and they became owners of the Hultsdorp Oil Mills and Manuring Works, which form the oldest industrial establishment in the island, having been founded in 1835 in connection with Price's Patent Candle Co., London. In 1898 the

old oil mills were burnt down, and were replaced by a much larger and more up-to-date plant, occupying an area of 13 acres, and giving employment to nearly 1,000 persons. Early in the nineties of last century experiments with Messrs. Freudenberg and Co.'s artificial manures for tea growing were first made on a scientific basis, with such satisfactory results that the demand for them underwent great development.

Messrs. Freudenberg and Co. also became bankers and had world-wide connections as general, shipping, and insurance agents, their agencies including the North German Lloyd and East Asiatic lines and the leading German insurance companies and banks.

The outbreak of the Great War led to the liquidation of the business; but it was resumed in 1924, and is now being operated with the enterprise and ability that characterised it in former decades. Messrs. Freudenberg and Co. are exporters of tea,

rubber, desiccated coconut, cocoa, fibre, and all products of Ceylon; while as general importers they handle all kinds of building materials, estate supplies, motor cars and accessories. They are agents for the Mercedes, Benz, Adler, Opel, Bean, Jowett Paige cars and the Moreland and White trucks. They are also agents for the Bosch sparking plugs, Carl Zeiss optical goods, the North German Lloyd and the Deutsch-Australische-Dampfschiff-Gesellschaft (Cosmos line), etc. The partners are Messrs. W. Freudenberg, S. Freudenberg, E. Wild and H. Gauger. The head office is at Bremen under the name of Freudenberg, Boehringer and Co. The firm's telegraphic addresses at Colombo are "Frudenberg," "Boehringer," "Nordlloyd" and "Austral," and the codes used by them are A B C 5th and 6th editions, A 1, Lieber's, Bentley's, Mosse, and private.

GEORGE PAYNE and CO., LTD.,

Tea, Coffee, and Cocoa Merchants, Ambewatte Mills, Slave Island.

As might be expected, some of the best known tea firms in the world have branches at Colombo. Amongst them are Messrs. George Payne and Co., Ltd., in whose premises at Ambewatte Mills, Slave Island, the choice teas of Ceylon are dealt with in a system of operation that well substantiates the firm's fame for the excellence of their teas throughout the world. Messrs. George Payne and Co., Ltd., specialise in blended tea, and in that connection are second to none. At the Ambewatte Mills, as well as in their great premises in London, the firm's experts accurately blend the different growths together and produce just that fragrant, invigorating and delicious flavour for which their blends are so celebrated. When it is realised that the tea from practically every estate in Ceylon and India has its separate characteristics and varies considerably, it will be seen how necessary and important is the tea blender's art. Certain growing districts produce tea of light flavoury character, others of full, rich, and strong liquor, while others are known for their pungency. All these different virtues have to be so arranged as to form a blend suitable

for the particular locality for which it is required. The long experience and study of Messrs. George Payne and Co., Ltd., enable them to produce blends to suit also the water of each district. For that purpose they store on their London premises samples of water from all parts of Great Britain and abroad, and these supplies are constantly replenished.

The head office of Messrs. George Payne and Co., Ltd., is at Tower Bridge, London, E.C., and besides their great warehouses in Queen Elizabeth Street, Boss Street, Goat Street, Three Oak Lane, and their export blending establishment in Lafone Street, in the metropolis, they have also extensive premises at Waddon, Surrey, Manchester, Liverpool, Glasgow, Cape Town, Durban, Winnebah and Saltpond, Gold Coast, and Calcutta.

They have been established at Colombo since 1904, and their manager there is Mr. W. F. Wood, who is assisted by Mr. W. R. A. McLellan. The firm's telegraphic address is "Pouring," and the codes used by them are the A B C 5th and 6th editions, Bentley's, and private.

EASTERN GARAGE, LTD., Galle Face;

Proprietors of THE COLOMBO TAXICAB CO. and LOVER BROS.

THE works of this well-known company, not far from the Galle Face Hotel, occupy about 5½ acres, and employ about 300 persons. Upwards of 1,000 gallons of petrol is sold daily at the two pumps at the entrance. In these works there is in operation an organisation of men and machinery representative of all that knowledge and skill have produced for the perfection of process and result in everything pertaining to motor engineering. Body building, painting, upholstering, electro-plating, etc., are performed there by the latest methods, and in a system of specialisation whereby each

worker acquires a proficiency that would otherwise be impossible.

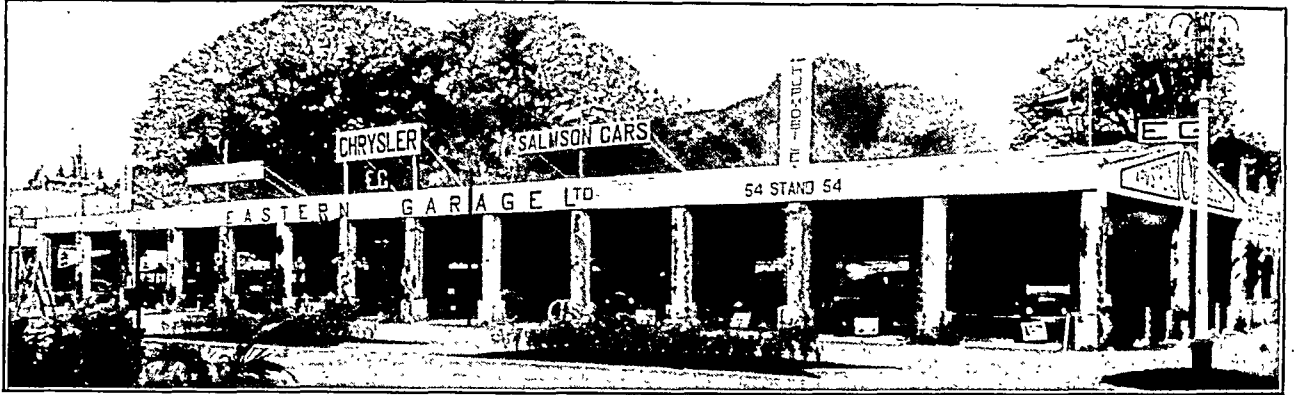
If a car meets with mishap anywhere in Ceylon and cannot run on its own wheels, Eastern Garage, Ltd., will, on notification, have it conveyed to its works on a special contrivance fitted with a powerful crane, which is always kept in readiness for such contingencies.

The stock of spare parts and general motor accessories kept by the company averages in value about £6,000. Whatever may be the requirements in such things the company is sure to be

able to meet it—if not in exact design or pattern asked for, something better doubtless will be forthcoming.

Eastern Garage, Ltd., is sole agent for the Standard, Armstrong-Siddeley, Hupmobile, Chrysler, and Salmson cars and the Commerce, Victor, and Federal trucks, and disposes of hundreds of these famous vehicles annually. The company is also sole agent for the Valspar Veedol oils and the Stephenson jacks, which latter have

place in all its affairs has been very considerable, including ownership of The Colombo Taxicab Co., which is the largest of its kind in Ceylon, where it was the pioneer in the introduction of taxicabs. It has a fine fleet of vehicles, in charge of careful and skilful drivers, for tours all over Ceylon at moderate rates. In that connection it may be mentioned that Eastern Garage, Ltd., issues an extremely interesting booklet entitled *Motor Tours through Ceylon*, which should be seen by



DISPLAY OF EASTERN GARAGE, LTD., AT THE ALL CEYLON MOTOR AND GENERAL ENGINEERING EXHIBITION, COLOMBO, IN 1927.

relegated the ordinary jack to the limbo of the obsolete.

The business was originated in 1903 in a very small way, and gradually expanded in keeping with the development of the local motor trade. It went into liquidation in 1919 and was purchased by Mr. G. F. Clayden, of extensive business experience in Great Britain, India, Indo-China, etc. Under his direction the concern was completely metamorphosed and has become one of the most noteworthy undertakings of the kind in the East. In 1925 Mr. Clayden formed the present company, of which he is managing director, and since then the development which has taken

everyone desirous of viewing the beauty spots of the island. The Eastern Garage, Ltd., also owns the business of Lover Bros., and in July, 1926, it purchased the Grand Motor Depot in Nuwara Eliya. It has also a branch at Haputale, where it has a fleet of powerful motor lorries, engaged in the transportation of tea and other produce from 28 estates, including those of Lipton, Ltd. The company has also a lock-up garage opposite to the Galle Face Hotel. The telegraphic address of Eastern Garage, Ltd., is "Hustle," Colombo, and the codes used are the A B C 5th edition, Motor Trade, and Bentley's.

THE CEYLON ICE AND COLD STORAGE COMPANY, LTD., Galle Face.

LIFE in Colombo to-day is certainly very different from what it must have been when there were no service and supplies like those of The Ceylon Ice and Cold Storage Co., Ltd., which contribute very considerably to the preservation of the health and happiness of the community. Its importance may be gauged by the fact that it is the only cold storage undertaking at present in Colombo, and from its well-stocked refrigerating rooms, having a storage capacity of about 50,000 cubic feet, are issued daily beef, mutton, fowl, fish, fruits, vegetables, dairy produce, and other perishable commodities of every description, which are delivered in the company's motor vans to the homes and hotels throughout the city and its environs.

The company manufactures ice at the rate of 25 tons daily, and has also one of the best establishments in Ceylon for the production of all kinds of aerated waters, of which it turns out about 500 dozen bottles daily. Ceylon water is said to be the best in the Orient, but at the factory in question it is filtered twice before being converted into the company's delicious beverages.

The business originated as a small ice and aerated water concern during the last decade of the 19th century. In 1899 it came under the management of Mr. H. S. Mackenzie, and the present company was formed in 1901. Since then the business has developed pro rata with the growing requirements of the city. The premises cover an area of about two acres, and give employment to about 120 persons.

THE LIGHTFOOT REFRIGERATION COMPANY, LTD.

This company have a branch at Colombo, and are reviewed on pages 197 and 198.

**E. B. CREASY and CO., General Merchants and Commission Agents,
Shipping, Clearing, Customs, and Express Agents. Head Office: 12, Baillie Street.**

MODERN science is revealing many wonders, but probably none more so than the sensitiveness of material things to receive and retain the impressions continually impinging upon them, and the life forces and influences to which they are exposed. Consequently the psychometrist would doubtless find very much to read from the establishment of Messrs. E. B. Creasy and Co., for it is one of the oldest of the local buildings, and, situated as it is in the midst of the bustle of local trade, has been for many decades associated with the reception and despatch of goods of every description. Its appearance is exactly as it was when the writer first saw it more than a quarter of a century ago. Then, as now, it had a sign indicating that it was the London and Colombo Forwarding Agency—forwarding goods to all parts of the world. Then, as now, the Royal Coat of Arms of Norway indicated that it was the Norwegian Consulate; and on its flag pole the crowning and passing of monarchs, occasions of national rejoicing, and other events, have been recognised by "banners fluttering in the breeze."

All over the world the name of E. B. Creasy and Co. is known in connection with local and mercantile transactions, for the firm have correspondents at every port, and there is no limit to

the size or weight of shipments which they are prepared to undertake as clearing, forwarding, and general commission agents.

Messrs. E. B. Creasy and Co. have long been prominently associated with the supply of momi tea boxes, veneer tea chests, hoop iron, nails, solder, hessians, acetic acid, galvanized corrugated roofing, cement, sanitary fittings, Jeyes' disinfectants, coal tar, paint, oils, varnish, and Solex carburettors.

They are the agents for Wakefield's "Castrol" and lubricating oils.

Besides their establishment in Baillie Street, they have very much larger premises in Skinner's Road South.

The business was founded in 1881 by Mr. E. B. Creasy, who died in England in 1921. On his retirement in 1899 he was succeeded in the control of the concern by his son and namesake, the present proprietor, who is Consul for Norway. He, too, has a son bearing the same name as himself.

Messrs. E. B. Creasy and Co.'s telegraphic address is "Cresco, Colombo," and the codes used by them are Bentley's, Western Union, A B C 5th and 6th editions, and Broomhall's Rubber edition.

TARRANT and CO., Import and Export Merchants and General Commission Agents, Union Place.

FROM the premises of Messrs. Tarrant and Co. a considerable quantity of the famous tea of Ceylon, as well as rubber, coconut, papain, spices, and other products of the island, is shipped to all parts of the world. That firm are also large importers of general merchandise, and operate as insurance and general commission agents. Their business was started in 1886 by Mr. Herbert Tarrant, who had been for some years previously in the tea trade in Mincing Lane. It was carried on at first under his own name, but after a short time was changed to Tarrant, Henderson and Co., and in 1896 it assumed its present designation. Its highly esteemed principal, Mr. H. Tarrant, is one of the oldest residents in Colombo. In partnership with him are Messrs. T. W. Jones and N. Walsgrove. The firm have an office in Baillie Street, Fort, and their London correspondents are Tarrant, Winn and Leighton, of 20 and 21, St. Dunstan's Hill, E.C.3. Messrs. Tarrant and Co.'s cable address is "Figites," Colombo, and the codes used by them are A B C 4th and 5th editions, Lieber's, Premier, Western Union (5 letter), Bentley's, and Imperial. They are agents for:—

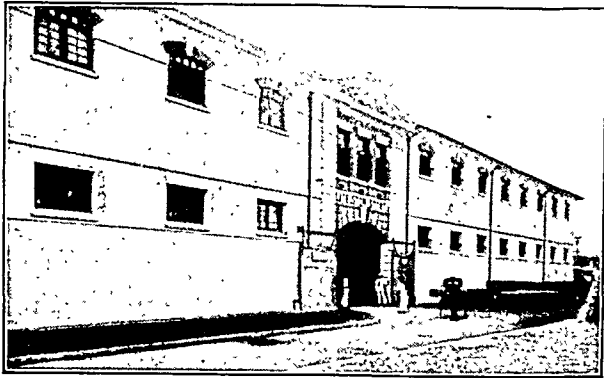
Western Assurance Co. of Toronto.
The North British & Mercantile Insurance Co., Ltd.
The Eagle, Star & British Dominions Insurance Co., Ltd.
National Provincial Plate Glass Insurance Co., Ltd.
The National Guarantee & Suretyship Association, Ltd.
The Railway Passengers Assurance Co., Ltd.

Tarrant Winn and Leighton, London.
The Central Agency, Ltd., Glasgow.
Reckitt & Sons, Ltd., Hull.
Chiswick Polish Co., Ltd.
National Roofing Co., New York.
The British Portland and Cement Manufacturers, Ltd., London.
Chr. Thomas & Bros., Ltd.
"Glaxo."
Bovril, Ltd.
W. Angliss & Co. (Aust.) Pty., Ltd., Melbourne.
T. Brunton & Co., Melbourne.
Macphail and Co., Ltd., Singapore.
Macgregor and Co., Ltd., Rangoon.
Henry Gardner & Co., Ltd., London.
Caledonian Insurance Co., London.
Bismag, Ltd.
J. & E. Waters, Ltd.
Burgoyne, Burbridges & Co., Ltd.
Siamese Steamship Co.
Zee Kol Manufacturing Co., Ltd.
International Chemical Co., Ltd.
R. M. Roberts & Co., Ltd. (Yemcolid Disinfectant).
W. R. Davies.
Hazelhurst & Sons, Ltd.
Price's Soap Co., Ltd.
Crown Cork Co., Ltd.
International Ice-lima Trading Co., Ltd.
Wm. Crawford & Sons, Ltd.
Studley Preserving Co., Pty., Ltd.
Finsbury Distillery Co., Ltd.
H. Hanna & Co., Pty., Ltd.
MacLaine, Watson & Co., Ltd.
Steel Products, Ltd.
F. Chivers & Co., Ltd.
E. Cook & Co., Ltd.
Juan Sanjanume Sen. C.
Michaelis, Hallenstein & Co., Pty., Ltd.

CLARK, YOUNG and CO.,

Importers, Exporters and General Commission Agents, Lauriston Stores. Offices: Prince Street.

LAURISTON STORES, as the premises of Messrs. Clark, Young and Co. are called, employ many persons in connection with the principal commodities sustaining the export and import trade of



**LAURISTON STORES OF
CLARK, YOUNG and CO.**

Ceylon. Plumbago, tea, rubber, desiccated coconut, oils, and the other products of the island are there handled with the discrimination that instantly detects superiority and inferiority; and is equally swift in effecting anything that may contribute to the maximum of satisfaction in service and supplies.

Messrs. Clark, Young and Co. are also very large importers of all classes of goods, but chiefly teak, rice, flour, Java and China sugar, piece-goods, etc.

The business was started in 1894 by Messrs. T. S. and E. S. Clark and the late S. D. Young, and has grown into one of the most noteworthy mercantile undertakings in the island. The firm's telegraphic address is "Centrum," and they use all the standard codes. They are agents and correspondents for the following:

MacKinlay & Co., 121, Chiswell Street, London, E.C.
Bengal Coal Co., Ltd.

Carr & Co., Ltd., Carlisle.

General Accident, Fire and Life Assurance Corporation, Ltd.

Eagle, Star & British Dominions Insurance Co., Ltd.
Yorkshire Insurance Co., Ltd.

Scottish Metropolitan Assurance Co., Ltd.

G. W. Goodwin & Son, Manchester.

Slater, Rodger & Co., Ltd., Glasgow.

John Jefferies & Co., Edinburgh.

J. T. Benkers, Schiedam.

Societe Anonyme des Usine Destree, Belgium.

Abdulla & Co., Ltd., New Bond Street, London, W.
China Underwriters, Ltd.

Steel Bros. & Co., Ltd., Rangoon.

North British Rubber Co., Ltd., Edinburgh and London.

East Asiatique Français, Paris and Saigon.

Gillespie & Co., New York.

Thos. G. Hill & Co., Ltd., Manchester.

Barton & Catlow, Manchester.

Jardine, Matheson & Co., Ltd., Hongkong.

Wellestein, Krause & Co., Batavia.

Anglo-Burma Rice Co., Ltd., Rangoon.

Ellerman Arracan Rice & Trading Co.

The Commonwealth Trust, Calicut.

James Taylor & Co., Manchester.

Geldard, Griffiths & Co., Bradford.

**H. W. CAVE and CO., Printers, Booksellers, Stationers, General Importers,
Builders of Pianos and Organs, etc. Head Office: Gaffoor's Building.**

Most of the large shopping emporiums in Colombo are general department stores. The establishment of Messrs. H. W. Cave and Co. differs from them in that it is not concerned with fashions in ladies' and gentlemen's apparel, nor with groceries and liquors, medicines, hardware, furniture, nor general domestic utensils; but its lack of these is more than made up by the exceptional completeness of the departments of trade in which the firm operate. An inspection of these reveals ample evidence that the discriminating policy of specialisation by which the business is conducted is thoroughly well justified.

Civilisation has developed nothing of greater importance and influence than the multiplicity of its literature, and the stock of books and other reading matter kept by Messrs. H. W. Cave and Co. is an interesting and accurate index to public tastes and requirements in that connection. The books obtainable from them range through every class of the publishing trade—grave and gay, educational and amusing, fact and fiction, philosophy and romance, in a great variety of bindings, from the cheapest editions to handsomely bound volumes with gilt-edged leaves.

Their large assortment of stationery is likewise

comprehensive, and, indeed, in that respect, has a greater diversity than is necessary in similar undertakings in Great Britain, for, in addition to the requirements of the vast number of people passing continually through Colombo, must be considered the minute necessities of the commercial and industrial interests of the island in relation to all manner of documentary specifications and account books, etc.

Messrs. H. W. Cave and Co.'s department for office equipments, such as filing cabinets, cash registers, adding machines, typewriters, etc., provides object lessons in what has been achieved for the minimum of labour and the maximum of accuracy and efficiency in all clerical work. Many clever inventions and uncommon specialities may be noticed amongst their supplies of athletic goods and gymnastic apparatus, fishing tackle, billiard tables, surveyors' requisites, silver ware, watches, pictures, artists' materials, tobaccoists' sundries, etc. As importers of musical merchandise and builders of pianos and organs, no firm has attained greater prominence throughout Ceylon than Messrs. H. W. Cave and Co. They are agents for all the leading makes of pianos, and in their piano and organ workshops very skil-

ful work is done in the repair of worn-out instruments, and in the building of new ones to withstand the ravages of climate and insects.

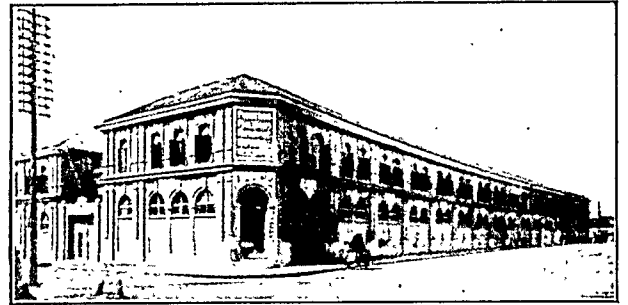
Visitors to Messrs. H. W. Cave and Co.'s establishment will appreciate its large and attractive tea-room, where all kinds of light refreshments are procurable. The delicious cakes and confectionery for which that place is noted, are made of the finest ingredients in its own conterminous bakery and under conditions of scrupulous cleanliness.

There is, however, no branch of trade in which Messrs. H. W. Cave and Co. are more noteworthy than in printing and its allied activities. The firm's printing works, in Slave Island, occupies an area of 25,000 square feet, and gives employment to about 300 people. It was built specially for them in 1918, and from time to time its equipment has been added to and improved. In 1926 about £4,000 was spent on new machinery, which now includes no fewer than 41 printing machines of various sizes. In the compositors' rooms are linotypes and one of the Ludlow typographs that has revolutionised typesetting. The speed and economy of the latter invention can only be appreciated by actual inspection of it in operation.

The infinity of interests necessitating the use of printed matter is impressively shown by the work performed by Messrs. H. W. Cave and Co. They turn out, for instance, many millions of tea labels, and their beautiful photographic reproductions in natural colours are masterpieces of artistic achievement. The firm are contractors to Government, and undertake printing in all the leading languages in Ceylon.

In the manufacture of all kinds of printing

blocks, and as machine rulers and manufacturing stationers, Messrs. H. W. Cave and Co.'s versatility is in keeping with their typographical efficiency.



PRINTING WORKS OF H. W. CAVE and CO.

The founder of the concern was Mr. H. W. Cave, M.A., F.R.G.S., who went to Ceylon from England as Secretary to the Anglican Bishop, and started work there by editing the *Ceylon Diocesan Gazette*, the first Church paper in the island. In 1876 he began importing religious books, and from that modest beginning has developed the business of H. W. Cave and Co., which now gives employment to upwards of 400 persons. In literary circles Mr. H. W. Cave, who died in 1913, is known in connection with his very interesting writings on Ceylon. His famous volumes "Golden Tips" and "Book of Ceylon" passed through many editions, and received high encomiums from the leading journals of England.

The partners in the firm now are Messrs. E. A. Bartlett, C. S. Brown, F. A. Dawkins, and C. H. Wratten. The telegraphic address is "Cave," and the codes used are Bentley's and the A B C 5th edition.

**BROWN and CO., LTD., Wholesale and Retail Hardware Merchants, Chatham Street.
Engineering Works: Darley Road, and Lanka Garage, Union Place.**

A SCOTTISH firm! That description of a commercial house in the Orient seems to carry more weight than accrues from even domicile in the Home country. In the lands beyond the seas, especially in the East, the Scottish character, silhouetted against foreign conditions and elemental necessities, stands out with sharper delineation than it does when viewed in the aggregate of national idiosyncrasy and procedure in the Northern Kingdom. For that there must be cogent reasons, not associated with the accredited orthodox standards of monetary considerations—reasons that go down into the heart of things and make for confidence and esteem, for development and progress in all branches of commerce and industry. The name of Brown and Co., Ltd., does not sound exclusively Scottish, but intercourse with the principals of the business which it designates leaves no doubt regarding their race.

An inspection of the showrooms of Messrs. Brown and Co., Ltd., reveals to the discerning eye very much regarding the improvements that are ever being made in the vast range of materials

embraced by the terms ironmongery and hardware, including the comprehensive assortment of such things pertaining to household requirements. Utility is there exemplified by many contrivances for the reduction of labour and the maximum of comfort and convenience—electrical and engineering accessories, tools, paints, distempers and varnishes, push and motor bicycles, agricultural implements, typewriters and office appliances, firearms, electro-plated and silver goods, etc., etc.

But the various departments in the firm's stores in Chatham Street are only of minor impression in comparison with their Lanka Engineering Works in Darley Road. That important undertaking occupies an area of about four acres, and gives employment to hundreds of workmen who are engaged under highly skilled Scottish engineers and supervisors in all branches of general engineering, but more especially in work relating to the manufacture, installation, and repair of tea, rubber, and coconut machinery, in which Messrs. Brown and Co., Ltd., specialise with marked success. One of the warehouses at the works,

SEAPORTS OF INDIA AND CEYLON.

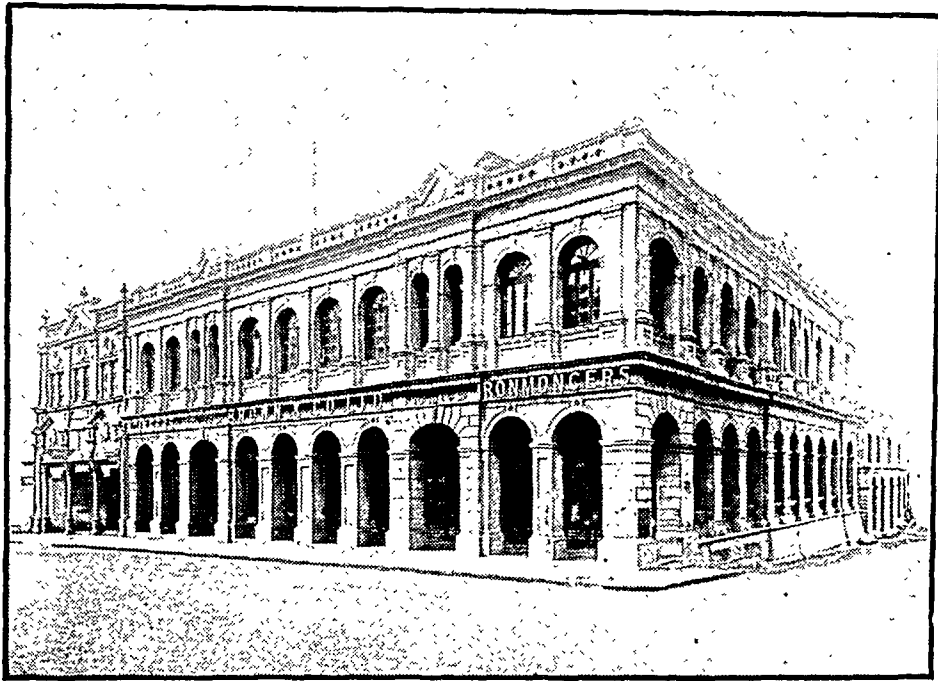
completed in 1918, and occupying an area of 12,870 square feet, is an excellent example of the company's skill as general structural engineers.

In Union Place, not far from the Lanka Engineering Works, is the company's Lanka Garage, which is devoted entirely to the productions of the Ford Motor Co. It covers about an acre of ground, and gives employment to about 80 workmen, who are engaged entirely in the work pertaining to the famous Ford vehicles. Consequently, by specialising in his respective job, each workman attains a proficiency therein that would otherwise be impossible. A noteworthy example of this proficiency is seen in the rapid dexterity and accuracy with which the Ford cars are assembled from the compact masses of separate parts as they arrive from the factories of the Ford Co.

is at 270, Mansion House Chambers, Queen Victoria Street, E.C. The telegraphic address is "Metal," and the codes used are the A B C 4th and 5th editions, Western Union, Bentley's, Marconi International, and private.

Messrs. Brown and Co., Ltd., are agents in Ceylon for the following:—

Ruston & Hornsby, Ltd.
Joseph Robinson & Co.
T. A. W. Clarke, Ltd.
George Scott & Co., Ltd.
Smith & Grace, Ltd.
Quirk, Barton & Co.
Electrical & Ordnance Accessories Co., Ltd.
John Tullis & Sons, Ltd.
W. N. Brunton & Son.
The British Mathews, Ltd.
Wm. Marples & Sons, Ltd.
The Black Diamond File Co.
Dobbie, Forbes & Co.
Alexander Shanks & Sons, Ltd.



PREMISES OF BROWN and CO., LTD., CHATHAM STREET.

The owner of a Ford car has the great advantage of being able to obtain spare parts without any delay—indeed, no company in the world offers better service in that connection than the Ford Co., and in the Lanka Garage the comprehensive stock of spare parts and accessories of every description is in keeping with the noted thoroughness of the Ford organisation at all its service and supply depots throughout the world.

The business of Messrs. Brown and Co., Ltd., was started in 1875 by Mr. James Brown at Hatton, Ceylon, under the designation of Brown, Rey and Co., and branches were opened at Dickoya and Maskeliya. In 1892 the firm was formed into a limited liability company under its present name. The capital, originally Rs. 500,000, is now Rs. 3,333,000. In 1897 the company began business at Colombo, and have branches at Hatton, Nawalapitiya, and Kandy. The managing director is Mr. W. Boak. The London office

The Paraffin Paint Co.
The West Kent Portland Cement Co.
The Yale and Towne Manufacturing Co.
Colthurst and Harding.
The Standard Varnish Co.
The Hoyt Metal Co.
S. L. Allen & Co.
Massey-Harris Co.
Newton, Chambers & Co.
The "Empire" Typewriter Co.
Royal Typewriter Co., Ltd.
The Midland Gun Co.
The Triumph Cycle Co.
Kynoch, Ltd.
Hendee Manufacturing Co.
Phelon and Moore, Ltd.
Ford Motor Co., Toronto, Canada.
Albion Motor Co., Ltd.
The Machine Gas. Ltd.
Kee Lox Manufacturing Co.
Anderson's Oil Expellers, etc.
Thos. A. Edison.
Coleman Lamp Co.
Royal Insurance Co., Ltd. (Fire, Motor, Marine, etc.)

MACKWOODS, LIMITED, Importers, Exporters, Estate, Insurance and General Commission Agents, Gaffoor's Building.

THE aspect of Colombo is very deceptive, so far as its commercial and industrial development is concerned, for the reason that the city has several distinct business districts, and the large mercantile firms have their mills and warehouses scattered about in places not readily noticeable by visitors making only a brief tour of inspection of the busy island capital.

One of the largest and oldest of the mercantile concerns is that of Messrs. Mackwoods, Limited, whose stores and mills in Maradana occupy an area of 12 acres, and give employment to many people. Through these extensive premises passes a considerable amount of Colombo's inward and outward merchandise.

The firm's importations are very comprehensive, and include piece-goods, hardware, corrugated roofings, barbed wire, nails, iron and steel bars, metal sheets, agricultural implements, cement, crockery, cutlery, enamelled ware, perfumery, biscuits, toys, etc., also rice, sugar, flour, etc. Many of the traders in Pettah, the busiest of Colombo's business centres, get their supplies from all parts of the world through Messrs. Mackwoods, Limited.

The firm are also amongst the large exporters of Ceylon produce, as is well demonstrated by the scenes in their tea, rubber, and desiccated coconut stores. Copra, coconut oil, cinnamon oil, fibres, cocoa, etc., are likewise shipped by Messrs. Mackwoods, Limited, throughout the world.

The records of this notable business date back to 1839, when it was founded by Mr. William

Mackwood, and carried on in his name until 1844, when it became known as Mackwood and Co. The present company was formed in 1919, and the directors are Messrs. F. M., F. E., F. O., and E. O. Mackwood, H. F. Parfitt, J. C. Kelly, and J. F. Sibbald. The concern was one of the few old houses that survived the collapse of the coffee industry of Ceylon, and has played an important part in the rise and development of the island's great tea trade.

The cable address of Messrs. Mackwoods, Limited, is "Mackwoods," and the codes used are the A B C 5th and 6th editions, Bentley's, and private. The firm operate as follows:

AGENTS FOR STERLING COMPANIES:

The Central Province Ceylon Tea Co., Ltd.
Hewagam Rubber Co., Ltd.
The Beau Sejour (Ceylon) Tea & Rubber Co., Ltd.

AGENTS AND SECRETARIES FOR:

The Rayigam Co., Ltd.
The Pine Hill Estates Co., Ltd.
The St. James Uva Tea Co., Ltd.
The Uva Highlands Tea Co., Ltd.
The Uva Ketawella Tea Co., Ltd.
The Gallebodde Estates Co. of Ceylon, Ltd.
The Girindi Ella Tea Co., Ltd.
Damblagolla Rubber Co., Ltd.

SECRETARIES FOR:

Eastern Garage, Ltd.

AGENTS FOR (INSURANCE):

Royal Exchange Assurance (Fire, Marine, Life and Motor Car).
Law Union & Rock Insurance Co., Ltd. (Fire and Life).
Northern Assurance Co., Ltd. (Motor Car, Burglary and Theft).

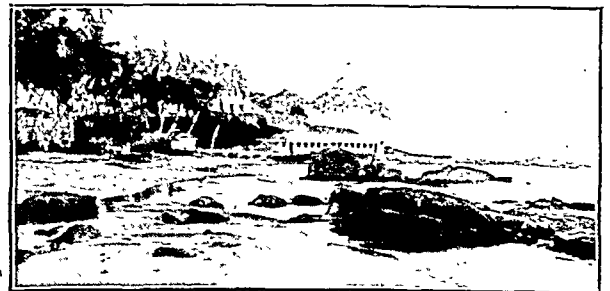
MOUNT LAVINIA HOTEL.

THE most popular trip for visitors to Colombo is a motor run to the celebrated Mount Lavinia Hotel, only seven miles away from the city. The run to Kandy, seventy miles distant, is not always possible, as many steamers do not stay long enough for that purpose; but there is always ample time for the cheap and exceedingly pleasant little tour along the interesting highway to Mount Lavinia Hotel, where a very delightful time may be spent under conditions such as do not obtain at any of the other notable hotels in the island.

In former times the handsome and palatial building now forming the Mount Lavinia Hotel was a residence of the Governor of Ceylon; and since it was taken over in 1924, from the former proprietary company, by its present owner, Mr. Arthur Ephraums, considerable improvements have been effected in its equipment and administration; so that visitors will be pleased with the facilities and resources in vogue there for their comfort, convenience, and pleasure.

The position of the hotel is very attractive. It stands on a lofty knoll at the extremity of a projecting point of the sea beach on the beautiful palm-fringed west coast. The area occupied by

the hotel is 2½ acres. The grounds are charmingly laid out, and on the well-kept lawns are chairs and tables where refreshments of all kinds are nicely and promptly served. The spacious



SEA-FRONT OF MOUNT LAVINIA HOTEL.

public reception rooms have been planned and furnished in a system that makes for the maximum of coolness and utility, and the long verandahs facing the ocean receive the full benefit of the prevailing inshore breezes.

In the principal dining-room 150 guests can be accommodated with ease at one time, and the

meals served there are noted for their excellence and variety. The hotel has 50 bedrooms, all furnished on a scale of amplitude conformable to the standards of first-class requirements. It is lighted throughout by electricity generated on the premises, and has also a billiard room, with two tables, and tennis courts. Probably the most attractive feature of the establishment is its unsurpassed facilities for sea bathing in perfectly safe conditions. Close to the sandy beach is its large and well-built pavilion with dressing rooms, where the fullest provision is made for all requirements in bathing costumes, towels, etc. Not far from the hotel is Mount Lavinia Railway Station, providing a frequent service of trains to and from the city, the journey occupying about twenty minutes.

Mr. Ephraums is also owner of the Bristol Hotel, Globe Hotel, and the White Horse Hotel, Colombo, the Anuradhapura Hotel, Anuradhapura, and St. Andrew's Hotel, Nuwara Eliya, all of which provide comfortable accommodation, good food, and service at very moderate rates. The most famous of them is the Bristol Hotel, situated in the midst of Colombo's great shopping emporia. He is also lessee of the railway refreshment cars and rooms.

Mr. Ephraums is the principal of A. E. Ephraums and Co., who are agents and secretaries for The Colombo Pharmacy, Ltd., which has its registered offices at 27, Upper Chatham Street, Colombo; and owns also the two establishments known as "The City Dispensary," in Norris Road and Union Place, Colombo, and the I. C. Drug Store, Bambalapitya, Colombo.

DELMEGE, FORSYTH and CO., LTD. General Merchants and Commission Agents, Victoria Arcade Building.

THROUGHOUT Ceylon the Asiatic Petroleum Co. (Ceylon), Ltd., is providing facilities and resources that are contributing very considerably to the country's economic progress, especially in relation to road transport by motor vehicles. That influential concern has in Ceylon no fewer than 75 installations for bulk petroleum and 21



DISTRIBUTING VEHICLES OF ASIATIC PETROLEUM CO. (CEYLON), LTD., COLOMBO.

installations for liquid fuel, which practically means that the motorist will find at every town and village a depot for the famous "Shell" motor spirit and motor oils.

The agents for the Asiatic Petroleum Co. (Ceylon), Ltd., are Messrs. Delmege, Forsyth and Co., Ltd., who are one of the principal firms in Ceylon, where they have been established for about eighty years. Their business, started at Galle, and transferred in due course to Colombo, when the latter became the chief port of the island, has developed pro rata with the growth of Colombo, especially in connection with its coaling and shipping interests. In that association Messrs. Delmege, Forsyth and Co., Ltd., operate on an extensive scale, as is indicated by the busy bunkering scenes at their large coaling yards at the harbour.

The directors of the company are Messrs. T. W. Hockley (Consul for Portugal and Vice-Consul for Spain), O. L. Beresford-Hope, T. H. Tatham, and A. R. Quarmer.

Messrs. Delmege, Forsyth and Co., Ltd., are Admiralty contractors and agents for:—

The Asiatic Petroleum Co. (Ceylon), Ltd.
The Anglo-Saxon Petroleum Co., Ltd.
The Burrakur Coal Co., Ltd., Calcutta.
St. George's & Natal Navigation Coal Companies, Natal.
F. W. Heilgers & Co., Calcutta.
Marine Insurance Co., Ltd., London.
Guardian Assurance Co., Ltd., London.
Board of Underwriters of New York.
The National Board of Marine Underwriters, New York.
The London & Lancashire Insurance Co., Ltd., London.
The Magadi Soda Co., Ltd.
Ledward & Taylor, Manchester.
The Ocean Steamship Co., Ltd.
Anchor, Brocklebank and Well Line of Steamers.
Natal Direct Line of Steamers (Bullard, King & Co.).
Prince Line (James Knott).
The Cunard Steamship Co., Ltd., Liverpool.
Red Star Line, Antwerp.
Shell Line of Steamers.
Suzuki & Co., Kobe and London.
Carreras, Ltd., London.
Macfarlane, Lang & Co., Ltd.
Bryant & May, Ltd.
John Robertson & Co., Ltd., Dundee.
The British Fire Insurance Co., Ltd.
The Prudential Assurance Co., Ltd.
Bureau Veritas, Paris.
Shell Transport & Trading Co., Ltd.

The firm's brokers are:

Delmege, Allen & Co., London.
James Burness & Sons, London.
Wm. Cory & Son, London.
Mann, George & Co., Ltd., London.
M. Samuel & Co., London.
Sinclair, Hamilton & Co., London.
Carleton & Moffat, New York.

RUBBER AND PRODUCE TRADERS (CEYLON), LTD., Gaffoor's Building.

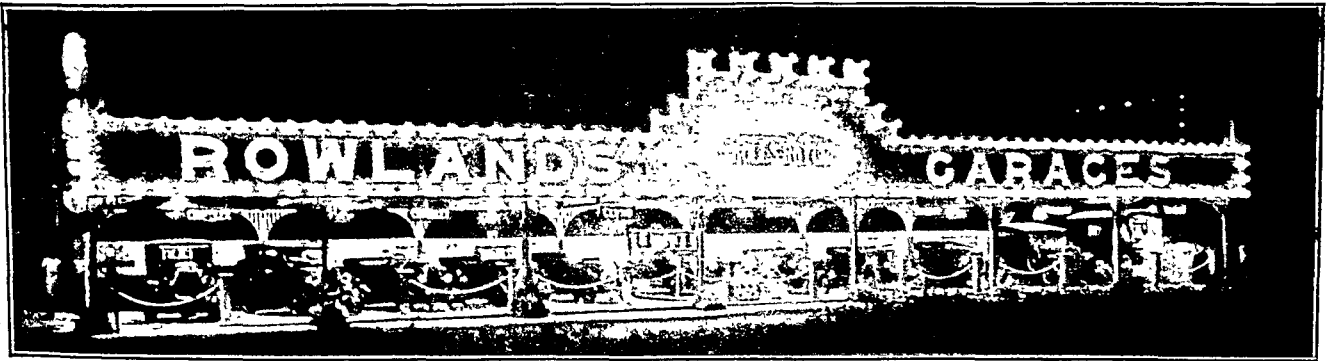
THE story of the development of rubber is one of the romances of modern commerce and industry, and the uses to which that indispensable material is now put have a range altogether beyond that which was thought possible a few decades ago before the introduction of modern inventions and their corresponding multiplicity of requirements. The cultivation of rubber in Ceylon has developed very greatly, and amongst the noteworthy firms engaged in its exportation is the Rubber and Produce Traders (Ceylon), Ltd., formed in 1926

as successors to Wilson Holgate and Co. (Ceylon), Ltd., established in 1918. As its title indicates, the company is also engaged in general produce, such as copra, desiccated coconut, cinnamon oil and leaf, citronella oil, etc. It has an office in London at 21, Mincing Lane, E.C. The manager is Mr. L. P. Hayward. The telegraphic address is "Colrub," Colombo, and the codes used are the A B C 5th and 6th editions, Lieber's, Bentley's, and private.

ROWLANDS GARAGE, Turret Road.

No phase of the business activity of Colombo is more noteworthy than the extent to which the automobile trade has been developed there. The city in that connection can hold its own with any in the Orient; indeed, in some respects, the facilities and resources which Colombo provides in

even extremely experienced motor experts; and it is in difficulties of that kind, as well as in repairs of every description, that Rowlands Garage substantiates its fame. Its machinery equipment is of the most comprehensive kind, including acetylene welding, electro-plating, and vulcanising; and



DISPLAY OF ROWLANDS GARAGE AT THE ALL CEYLON MOTOR AND GENERAL ENGINEERING EXHIBITION, COLOMBO, IN 1927.

everything associated with motor vehicles are probably unsurpassed anywhere east of Suez. Rowlands Garage, for instance, must be referred to when the motor trade of Colombo is under consideration, and cannot fail to impress the stranger who may visit it with erroneous ideas of what has been accomplished locally in motor engineering. It occupies an area of about seven acres, and gives employment to more than 400 persons. That alone might be sufficient to indicate its prominence and importance; but only by actual inspection of its numerous departments can the perfection of its service and supplies be properly appreciated. The work done there covers a range of operation that includes everything relating to motor vehicles in all conditions in which they can be considered. A motor vehicle can be built there in harmony with the most acceptable ideals of orthodox design, or embodying any uncommon feature in capacity or appearance that may be desired.

It has become a comparatively simple matter now in all up-to-date garages to effect with skill and rapidity the ordinary kind of repairs consequent on accident, neglect, or ignorance; but the best makes of cars sometimes develop extraordinary idiosyncrasies of imperfection that baffle

any part of the mechanism of any car, including gear wheels, can be produced at Rowlands Garage with a celerity truly astonishing.

Rowlands Garage is agent for the Rolls Royce, Sunbeam, Crossley, Hillman, Chevrolet, Oakland, Pontiac, and Chandler cars, which are displayed in its large and handsome showroom. An interesting department of the business is one for second-hand cars, which are taken in part-payment of new ones; and many an excellent bargain is there procurable by the discerning.

Rowlands Garage is an evolution of the former motor department of the business of H. W. Cave and Co., and has developed enormously since it was taken over in 1923 under its present name by Mr. F. C. Gibbs (previously partner in that firm) and Mr. A. P. Rowlands. It is interesting to note that Mr. Gibbs early in his career was employed in the "City Press" works of Messrs. W. H. and L. Collingridge, printers and publishers of this volume.

The telegraphic address of Rowlands Garage is "Prowlands," Colombo, and the codes used are Bentley's and private. The London agents are Robertson and Malcolm, 5, Bishopsgate, E.C., and the New York agents Robertson and Malcolm, Singer Building.

NESTLÉ and ANGLO-SWISS CONDENSED MILK COMPANY, "Nestlé House," Union Place.

WHEN the business of the Nestlé and Anglo-Swiss Condensed Milk Co. was founded in 1866 it marked the commencement of a great era in food preservation, and inaugurated a vast improvement in the commissariat of all peoples, but especially those in the tropics, where life during the preceding centuries had been, for natives of the temperate zone, much more trying than in these days of remarkable inventions for the enhancement of health and comfort. Nothing is more necessitous for the young and sick than milk, and many lives were lost that would otherwise have been saved had there been at hand the celebrated product of the Nestlé Co., whose huge interests now encircle the globe, and whose goods are to be found wherever civilisation has penetrated, and in many places where it has not. The Nestlé business is the largest of its kind in the

world, and has condensaries not only in Switzerland, but also in France, Holland, Norway, England, United States, Canada, and Australia. For many years the company transacted their trade in Ceylon through local agents, but in 1912 opened at Colombo a branch which has since developed very considerably. As in all other parts of the world, the company's sweetened and unsweetened condensed milk, sterilised natural milk, (whipped) cream, malted milk, milk food, "Lactogen," as well as their Peter's, Cailler's, Kohler's, and Nestlé's cocoa, chocolate, and bonbons, are very popular in Ceylon, and in great demand.

The company's manager at Colombo is Mr. T. A. Ryde. The telegraphic address is "Nest-anglo," and the codes used are the A B C 5th edition, Western Union, Bentley's, and private.

LEECHMAN and CO., Exporters of Ceylon Produce, Estates and General Commission Agents, National Mutual Building, Chatham Street.

THE business of Messrs. Leechman and Co. was established in 1864, when coffee was the principal product of Ceylon. On the failure of that industry, through leaf disease, about ten years later, Messrs. Leechman and Co. were among the pioneers who introduced into the island the cultivation of cinchona and tea. Later, too, they were similarly distinguished in connection with rubber, both in Ceylon and the Federated Malay States.

The founder of the business was Mr. G. B. Leechman. He also established in 1866 the firm of G. and W. Leechman, who leased and operated for about twenty years the Hultsdorf Coconut Oil Mills, and thereafter the Colombo Oil Mills, until the end of 1911.

The present partners in Leechman and Co. are Messrs. J. J. Wall, D. T. Richards, and J. S. McIntyre. The firm are exporters of tea, rubber, and all the products of Ceylon, and have connections throughout the world. Their telegraphic

address is "Leechman," Colombo, and their codes are the A B C 4th and 5th editions, Bentley's, and Broomhall's (Rubber). They are agents for the following:

Carolina Tea Co. of Ceylon, Ltd.
Nuwara Eliya Tea Estates Co., Ltd.
The Choisy Tea Co. of Ceylon, Ltd.
The Beverlac (Selangor) Rubber Co., Ltd.
Panagula Rubber Co., Ltd.
Ederapolla Tea Co. of Ceylon, Ltd.
The Highland Tea Co. of Ceylon, Ltd.
Westward Ho Tea Co. of Ceylon, Ltd.
Kongsi Rubber Co., Ltd.
The Yokohama Fire, Marine, Transit & Fidelity Insurance Co., Ltd.
Norwich Union Fire Insurance Society.
New Zealand Insurance Co.
London & Scottish Assurance Corporation, Ltd.
Norwich & London Accident Insurance Association.
Norwich Union Life Office.
Underwriters at Lloyds.
Lyall, Anderson & Co., London.
Shand, Haldane & Co., London.
Grindlay & Co., Ltd., London, Calcutta, and Bombay.

THOMSON, TETLEY and CO., Importers of Piece-goods, etc., Prince Building.

THE one great outstanding class of British merchandise in the Orient is that of piece-goods; and while these materials are regarded by the uninitiated as primarily of little, if any, individual or collective interest, it is, nevertheless, true that no productions are more regulated by custom and idiosyncrasy, by tradition and climate than the enormous variety of modern textiles. The patterns and designs in vogue in one district are not always popular in other parts of the same country; so that throughout the great territory of the Orient are to be found many contradictions in preference for chromatic effects and quality of texture. Ceylon provides many striking examples of the vast difference existing there in regard to demand and supply in the connection indicated; but, as the Sinhalese, who form the bulk of the population, prefer more expensive materials than

the other Eastern peoples, Colombo is, in the piece-goods trade, regarded as a "fancy" market, to which Messrs. Thomson, Tetley and Co. contribute considerably, being, as they are, the leading piece-goods firm devoted exclusively to that trade in the island. They do a great deal of indenting for native traders, and have been established at Colombo since 1910; but transacted trade with Ceylon for many years previously through local agents. The director at Colombo is Mr. E. D. Molyneux. The firm's telegraphic address is "Shipment," Colombo, and their codes are Parker's, Premier, A B C 5th and 6th editions, Bentley's, and private. At Manchester and Madras the firm are established as Tetley and Whitley, Ltd., and well known in piece-goods circles throughout India.

GORDON FRAZER and CO., LTD., Estate and Insurance Agents, Gaffoor's Building.

The business of Messrs. Gordon Frazer and Co., Ltd., chiefly estate agency, was established in 1890, and is one of the principal concerns of its kind in Colombo. The firm have recently opened new warehouses and mills at Wekande, where tea, rubber, and other products of Ceylon are carefully prepared by the most accredited methods for export to all parts of the world. The directors are Messrs. G. E. Woodman, F. J. Hawkes, F. H. Lavard, and F. F. Roe. The telegraphic address is "Frazerco," Colombo, and the codes used are the A B C 5th edition, Broomhall's (Rubber), and Bentley's.

Messrs. Gordon Frazer and Co., Ltd., are agents for:

Scottish Union & National Insurance Co.
South British Insurance Co.
Royal Exchange Assurance Co.
The Relugas Tea Estates, Ltd.
Angusta Tea Estates Co., Ltd.
Rajawella Produce Co., Ltd.
Tea Corporation (1921), Ltd.
The Alluta Rubber & Produce Co., Ltd.
The Lavant Rubber & Tea Co., Ltd.
Kadienlena Tea Estates, Ltd.
Kenilworth Tea Co., Ltd.
Lethenty Tea Estates Association, Ltd.
Taldna Rubber Co., Ltd.
The Bowlana Tea Estates, Ltd.
Kurunegalla Rubber Co., Ltd.
Glentafie Tea Estates, Ltd.

AGENTS AND SECRETARIES FOR:

Arratenne (Ceylon) Tea & Rubber Co., Ltd.
Aviswella Tea & Rubber Co., Ltd.
The Clifton Rubber Co., Ltd.
Dartonsfield Estate, Ltd.
Gallawatte (Ceylon) Rubber Co., Ltd.
The Kalutara Rubber Co. of Ceylon, Ltd.
The Kallande Rubber Co., Ltd.
The Kelani Valley Rubber Co. of Ceylon, Ltd.
The Lower Perak Coconut Co., Ltd.
The Mentenne Rubber Co., Ltd.
The Moneragalla Rubber Co., Ltd.
The Muppane Valley (Ceylon) Rubber Co., Ltd.
Pembroke Estate, Ltd.
The Perak Kongsi Coconut Co., Ltd.
The Pettingalla Tea Co., Ltd.
The Sittagama Rubber Co., Ltd.
The Tuan Mee (Selangor) Rubber Co., Ltd.
The Udapolla Rubber Co., Ltd.
Yatapola Estate, Ltd.
Panakura Estates, Ltd.
The Craiglands Tea & Rubber Co., Ltd.
H. Bastian Fernando Estates, Ltd.
The Labugama Rubber Estate, Ltd.
Midford (Ceylon) Tea Estates, Ltd.
The Ceylon Financial Investments, Ltd.
The Murraythwaite Rubber Co., Ltd.
The Kegalla Rubber & Tea Co. of Ceylon, Ltd.
The Biddescar Rubber Co., Ltd.
Darton Development Co., Ltd.
The Gammikande Rubber Estates, Ltd.
The Perak River Coconut Co., Ltd.
The Nakkala Rubber Co., Ltd.
The Heenpannawa Coconut Co., Ltd.
The Theberton (Ceylon) Tea Estates, Ltd.

HOLLAND-CEYLON COMMERCIAL COMPANY, Gaffoor's Building.

THE commercial community of Colombo is not so cosmopolitan as that of the great ports of the Far East, and most of the local firms are English, Indian, or Sinhalese. A noteworthy exception is afforded by the Holland-Ceylon Commercial Co., which has a title reminiscent of the time when the island was a Dutch possession. That company, which well upholds the best traditions of Dutch commercial enterprise, was established in 1916 with a capital of one million guilders, and is engaged in the exportation of all kinds of Ceylon produce, especially copra, desiccated coconut, cinnamon, and oils, which it ships chiefly to Holland, Great Britain, and the United States. The import trade of the company is principally in piece-goods. The company has at Colombo large warehouses well adapted for the storage of their merchandise, the section for copra having a capacity of about 12,000 tons. The directors at Amsterdam comprise Mr. W. Ruys, Managing Director of the Rotterdam-Lloyds Steamship Co., Mr. W. H. J. Oderwald, Managing Director of the "Nederland" Steamship Co., and Messrs. M. Bury, W. Stork, and Dr. Th. M. Verster. The manager at Colombo is Mr. L. van der Spoel. The telegraphic address is "Hollandco," Colombo. The following are the agencies held by the company:—

H. P. Gelderman & Zonen, Oldenzaal van Gelder Zonen, Amsterdam.

P. F. van Vlissingen & Co., Helmond.
Koninklijke Weefgoederenfabriek v/h C. T. Stork & Co., Hengelo.
Nederlandsche Plantenboter Fabriek, Amsterdam.
Batavia Sea & Fire Insurance Co., Batavia.



Packing Copra for Shipment in the Stores of the Holland-Ceylon Commercial Co.

The Netherlands Insurance Co. (Est. 1845), The Hague
The Phoenix Assurance Co., Ltd., Liverpool, Marine Department.
Jurgens Margarine Works, Nymegen, London.
The Anglo-Dutch Milk & Food Co., "Hollandia," Vlaardingen.
Claim and Settling Agents for Nord-Deutsche Versicherungs-Gesellschaft (and affiliated companies), Hamburg.
Claim Agents for Mannheim and Continental Insurance Co., Mannheim.

COLOMBO COMMERCIAL COMPANY, LTD., Fort and Union Place.

THE Colombo Commercial Co., Ltd., was founded in 1876 for the purpose of acquiring estates in Ceylon for the production and export of coffee. A few years later, however, the coffee industry declined owing to the spread of the coffee-leaf disease, and, like the other planting firms in the island, the company mentioned turned its attention to the cultivation of tea.

In addition to the production of tea on its own estates, the company acts as agent for a number of sterling and rupee companies, and purchases largely for its export trade from the teas offered on the local market. In its premises at Colombo, occupying twenty acres, large quantities of tea are blended and repacked into lead packets, fancy tins and boxes, for shipment to all parts of the world.

Apart from the activities pertaining to the tea and estate agency departments, the major portion of the works is devoted to the manufacture of all kinds of tea and rubber machinery, not only for the planters of Ceylon, but also for those of South India and Java. The machine shops and wood-working mills are on a very comprehensive scale and fitted with up-to-date plants.

In general constructional engineering the Colombo Commercial Co., Ltd., operates with similar completeness, and many buildings at Colombo and elsewhere in Ceylon bear witness to its capacity in that connection.

The Colombo Commercial Co., Ltd., has greatly benefited Ceylon by the attention it has paid to suitable fertilisers for the island's agricultural products and the very extensive business it has developed in their manufacture. It has large fertilising mills beside the main railway line at Hunupitiya, and has recently erected other big mills along the Kelani Valley railway line, about nine miles from Colombo.

The company has also engineering workshops at Badulla and Kandapola specially devoted to the requirements of estates. Contiguous to the Colombo premises is the factory of the Colombo Lead Mills, Ltd., for which it is agent. In that establishment is produced the linings of the chests in which the tea of the Colombo Commercial Co.,

Ltd., and that of many of the other exporting houses is shipped from the island.

The two-storeyed building containing the company's administration offices in Colombo is known as Acland House, and was originally the mess quarters of the Ceylon Rifle Regiment. It stands in extensive grounds, and the upper portion forms the residence of the manager.

The company's London office is in Thames House, Queen Street Place, E.C. The codes used are Bentley's, Kendall's, and Lieber's.

Among the agencies held by the company are the following:—

SOLE AGENTS FOR:

Birkmyre Bros., Calcutta; hessians and gunnies.
C.C.C. tea rollers, roll-breakers, desiccators and scrap washers.
David Bridge and Co.'s rubber machinery.
"Day Elder" lorries.
Gillingham "Red Hand" cement.
I XL pruning knives.
Leyland Motors, Ltd.
Penman's auto-expressors.
Savage's tea cutters.
Solignum wood preservative.
Southwark cotton belting.
Tangyes, Ltd., oil and suction gas engines and tea rollers.
Venesta, Ltd.
"Vulcan" disinfectant.
W. Gunther and Sons' turbines and Pelton wheels.

AGENTS FOR STERLING COMPANIES:

Colombo Lead Mills, Ltd.
Ellawatte Ceylon Tea Estates, Ltd.
Hunasgeria Tea Co., Ltd.
Mayfield (Dimbula) Tea Co. of Ceylon, Ltd.
Mooloya Estates, Ltd.
Ouvah Ceylon Estates, Ltd.
Rani Travancore Rubber Co., Ltd.
Spring Valley Ceylon Estates, Ltd.
Telbedde Ceylon Estates, Ltd.

AGENTS AND SECRETARIES FOR RUPEE COMPANIES:

Agra Tea Co. of Ceylon, Ltd.
Baddegama Estate Co. of Ceylon, Ltd.
Bank of Uva, Ltd.
Cullen Estates, Ltd.
Kalkudah Coconut Estate Co., Ltd.
Pitakande Tea Co. of Ceylon, Ltd.
Rye Estate Co. of Ceylon, Ltd.
London and Lancashire Insurance Co., Ltd., London and Liverpool.
Thames and Mersey Marine Insurance Co., Ltd., London.

A. F. JONES and CO., General Exporters, Stratford Stores, Slave Island.

STRATFORD STORES, the name of Messrs. A. F. Jones and Co.'s premises, is arresting, especially to people interested in the commerce and industry of Colombo. It might be regarded as indicating a general department store, such as obtains in Stratford, catering to universal demand. Stratford Stores, Slave Island, are utterly different from that, and are devoted to the preparation and export of many of Ceylon's products. Tea, for instance, is there tasted, blended, and packed for shipment to many parts of the world. Cocoa,

desiccated coconut, coconut-oil, citronella-oil, cinnamon-oil, etc., are also handled by Messrs. A. F. Jones and Co., whose business was started in 1918. The partners are Mr. A. F. Jones and Mr. H. W. Dainty.

The firm operate likewise as general commission agents, and are agents for the I.O.A. (Insurance of Australia). Their cable address is "Afjon," Colombo, and the codes used by them are Bentley's, Lieber's, A B C 5th edition, and private.

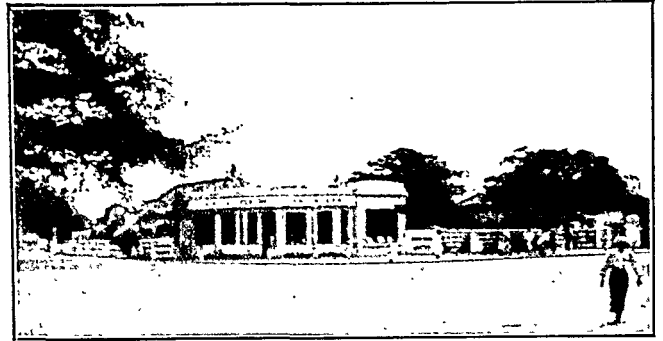
FENTONS, LTD., Electrical Engineers and Contractors, 46, Union Place.

In the wide range of electrical engineering and supplies, Messrs. Fentons, Ltd., operate with the specialised knowledge and skill that solve every problem by the most economical as well as the most effective and speedy methods. In electrical work it is the little things that count, the little errors avoided, the anticipation of the little weaknesses and flaws which, if neglected, lead to extensive and costly damages and repairs. Messrs. Fentons, Ltd., are particular about these little things, and nothing is too great for them to undertake. Their supplies of electrical fittings and accessories of all kinds provide object lessons in the multiplicity of things which electric science has evolved for the perfection of illumination and motive power. The exterior of their premises proclaims in arresting letters that they supply "Switchboards, telephones, turbines, lamps, radio apparatus, dynamos, motors, repair mechanics available night and day, transformers, voltmeters, switches and electric fans for hire from Rs.2.50 per month. Fentons for everything electrical," etc.

The business was established in 1919 by Mr. H. Fenton, A.M.I.E.E., the managing director of the present limited liability company, which took it over in 1921.

The telegraphic address of Messrs. Fentons,

Ltd., is "Electric," and the codes used are the A B C 5th edition, Western Union, and Bentley's.



PREMISES OF FENTONS, LTD.

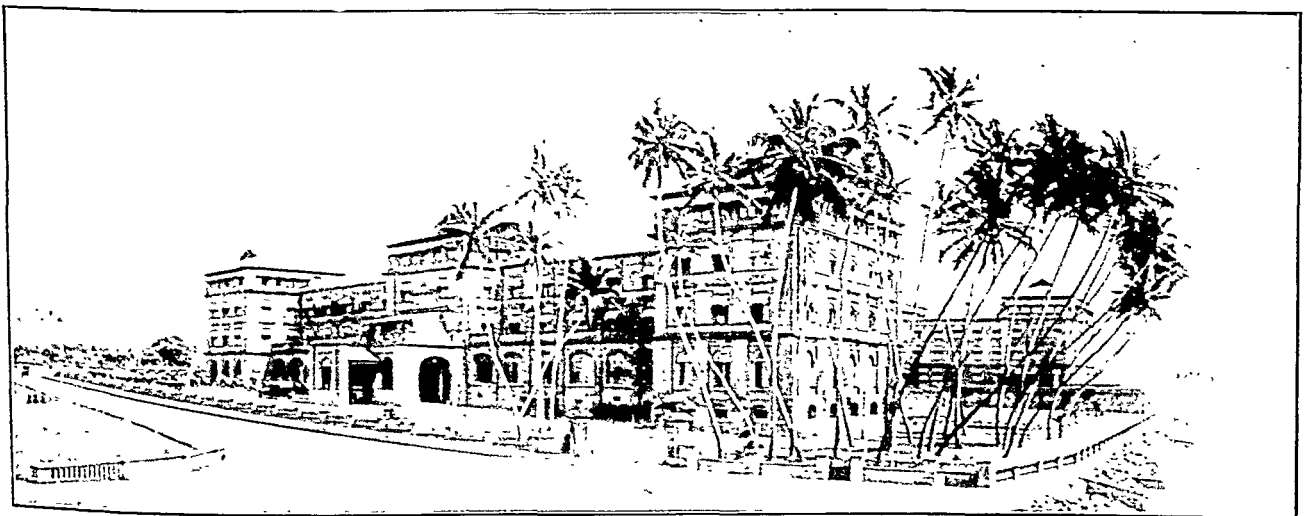
They are agents for:—

Philips' Glowlampworks, Ltd.
British Insulated Cables, Ltd.
The Century Electric Co.
Pritchett & Gold & Electrical Power Storage Co., Ltd.
Peto & Radford.
"Higgs Motors," Birmingham.
McDowell & Co., Ltd., Madras.
Marconi Wireless Telegraphy Co., Ltd.
F. W. Berk & Co., Ltd.
Burndebt Wireless, Ltd.
Sir W. G. Armstrong-Whitworth & Co., Ltd.
Hydro-Electric Dept.

GALLE FACE HOTEL COMPANY, LTD.

The nucleus of the Galle Face Hotel was formed about 1885 by the construction of a building that had accommodation for about twenty persons, and was used chiefly as a resthouse by coffee planters. But the growth of Colombo led to a corresponding

effect in the hotel has been great indeed. The establishment, built in the Renaissance style, occupies about five acres of land, gives employment to about 350 persons, and has accommodation for 400 guests. The situation of the Galle Face Hotel



GALLE FACE HOTEL.

demand for first-class hotel accommodation, and accordingly the Galle Face Hotel was rebuilt on a large scale—sufficient, it was thought, to meet all possible future requirements. That was in 1894, and the metamorphosis which has since been

is magnificent, and the warm, blue tropic sea comes up almost to its walls. The hotel is a little over a mile from the landing stage and about equidistant from the main railway station. In the lounge, or central hall, are to be seen, especially

during the tourist season, from November to April, people from every part of the world. For their comfort and convenience, there are long and comfortably furnished verandahs, arranged so that they get the benefit of the breezes from the sea and land. The dining-room has seating capacity for 400 persons, and the kitchen and kindred sections are under the supervision of an experienced European chef.

The bedrooms of the hotel are comfortably and tastefully furnished, and range from single rooms to luxurious suites commanding views that will remain in the memory. A large number of the apartments have their own bathrooms, and all of them are fitted with electric lights and fans.

The spacious ballroom of the hotel presents a very gay and animated scene on the frequent dance evenings. The grounds and terraces of the hotel

are exceedingly pleasant, especially in the evenings when Colombo's famous sunsets transform sea and coast with a chromatic glory that is never duplicated and never can be.

Not the least of the many attractions of the Galle Face is its sea-water swimming bath with dressing-rooms and fresh-water shower. The hotel has its own steam laundry, ladies' and gentlemen's hair-dressing saloons, tailors' shop, pharmacy, post-office, etc. It has also a fleet of 80 motor-cars, and experts are at the disposal of visitors for the purpose of mapping out comprehensive tours in Ceylon at moderate rates. The wireless address of the Galle Face Hotel is "Gall-facio," Colombo, and the codes used are the ABC 5th edition and Bentley's. Rooms at the hotel may be booked and deposit paid at any of the offices of Thomas Cook and Son.

BRODIE and CO., LTD., Wholesale Wine and Spirit Merchants, 19, Upper Chatham Street.

Most of the commerce of Colombo is transacted by firms very much alike in the scope of their activities as general merchants and commission agents. Messrs. Brodie and Co., Ltd., however, have specialised exclusively in the wholesale wine and spirit trade since 1846, when their business was established. Their premises are admirably adapted for the purpose to which they are devoted; and the portion fronting Chatham Street is an interesting example of how the Dutch built when the island belonged to Holland. Behind that section, with its thick walls and welcome shade, are the commodious stores which were erected for the firm between thirty and forty years ago. The object aimed at in their construction, evenness of temperature, has been fully realised, which is an important and valuable asset in a climate like that of Colombo, where it is very difficult to keep wines in good condition without the facilities possessed by Messrs. Brodie and Co. In their cool recesses are the bottled reminiscences of long past days in

sunny lands, sunbeams appropriated by grapes in famous vineyards, usquebaugh that restores the accent of the glens and moors of the Celts, malt brews for thin and feeble folk, liqueurs for fastidious connoisseurs, and all kinds of beverages for all kinds of people. They import a good deal of wine in bulk, and their bottling department is equipped with modern machinery.

The firm was formed in 1924 into the present limited liability company, and the managing director is Mr. W. C. Brodie, son of the founder of the business. The other directors are Messrs. R. Robinson, S. M. M. Mac, L. C. Queen, M. J. Carvalho, and L. F. Arnolda. Messrs. Brodie and Co., Ltd., are agents for Ainslie's Royal Edinburgh whisky; J. and F. Martell's brandies, Cognac; W. and A. Gilbey, Ltd., ports, gin, and whisky, London; Barclay Perkins, Ltd., London lager, London; and J. Wix and Sons, "Kensitas" cigarettes, London.

BROUGHAMS, LTD., Complete House Furnishers and Outfitters, York Arcade, Fort, and Front and Main Streets, Pettah.

SUITABILITY is one of the most important considerations for a business catering to public requirements. Consequently the new premises of Messrs. Broughams, Ltd., in York Arcade, are admirably located, and very convenient for passengers landing from the steamers for shopping purposes. Gentlemen will find there an excellent assortment of outfitting materials well calculated to meet every requirement; and special attention is devoted by the firm to the tailoring trade in all its branches. A very attractive selection is afforded in tropical suitings as well as in those for colder climes. Sartorial efficiency is primarily dependent upon accuracy of measurements and cut, and in that respect the facilities and resources of Messrs. Broughams, Ltd., are all that the most fastidious could desire. All orders are fulfilled on the

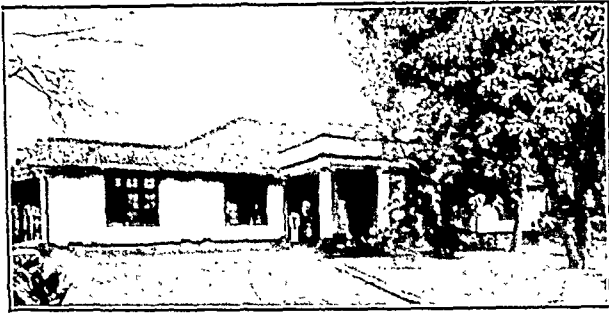
premises, and a feature is made of rapidity as well as efficiency of execution; so that orders may be completed while the passenger remains in port.

Messrs. Broughams, Ltd., are importers of all kinds of general household goods, curtains, tapestries, upholstery materials, glassware, crockery, etc.; and at the corner of Front and Main Streets, Pettah, have an establishment devoted exclusively to furniture, which they manufacture in all designs, to suit all exchequers.

The business was established in 1923, and the present company was incorporated on November 1st, 1926, the directors being Messrs. J. MacDonald, H. H. Brougham, W. G. Beauchamp, and H. J. Adkins. The telegraphic address is "Smart," Colombo, and the code used is Bentley's.

CUMBERBATCH and CO., General Merchants and Commission Agents, Ambawatte House, Vauxhall Street, Slave Island.

The premises of Messrs. Cumberbatch and Co., occupying about three acres, have an appearance reminiscent of former times, when there were no great modern office buildings in Colombo, and the merchants arrived at and departed from their business places in horse-drawn vehicles, many with coachmen and footmen in gorgeous and dis-



OFFICES OF CUMBERBATCH and CO.

tinctive liveries. If anyone connected with the business in its early years could visit the old premises now, much would be found as it used to be and very much that has altered considerably. The records of the concern go back to the 70's of last century, when it was founded under the name of Sabonadière and Co., and carried on as such until 1884, when the present designation was assumed. Coffee figured at first very largely amongst the firm's exports, and after the failure of that industry Messrs. Cumberbatch and Co. turned their attention to tea, with very gratifying results, for they became one of the leading houses

in Ceylon in that connection. Accordingly to-day the testing and blending of tea for shipment abroad are carried out by Messrs. Cumberbatch and Co. with the minute understanding that comes from long experience of that work.

The firm are also exporters of rubber, and for that branch of trade they have an office at Kuala Lumpur, in the Federated Malay States. They are likewise importers of general estates' supplies. The partners are Messrs. R. S. Templer, A. J. Denison, H. V. Hill, C. C. Durrant, R. Whittow, and J. A. Loram. Messrs. Cumberbatch and Co.'s telegraphic address is "Cumberbatch," Colombo, and the codes used by them are the A B C 5th and 6th editions, Lieber's, Bentley's, and Broomhall's rubber edition. They are agents for the following:—

Inglis, Ltd., Melbourne, Sydney, and Brisbane.
 Crabbe & Co.; Dickson, Anderson & Co., Ltd., London
 agents for the Scottish Trust & Loan Co. of Ceylon.
 Deltenne Ceylon Tea Estates, Ltd.
 The St. George Rubber Estate, Ltd.
 The Glendon Rubber Co., Ltd.
 The Rubber Estates of Bentota, Ltd.
 The Avon & Golconda Tea & Rubber Co., Ltd.
 The Lowmont Estates Co., Ltd.
 The Elmhurst (Ceylon) Tea & Rubber Estates, Ltd.
 The Palatine Insurance Co., Ltd.
 Stratheden Estate & Gautier de Ste Croix & Sons.
 AGENTS AND SECRETARIES FOR:
 Shalimar (Malay) Estate Co., Ltd.
 The Ceylon Planters' Rubber Syndicate, Ltd.
 The Rubber Growers Co., Ltd.
 Indo Malay Estates, Ltd.
 The Bukit Darah (Selanger) Rubber Co., Ltd.
 The Good Hope (Selanger) Rubber Co., Ltd.
 The Gonagama Rubber Co. (Ceylon), Ltd.

CEYLON MOTOR TRANSIT COMPANY, Motor and General Engineers, Kanatte Road, Borella.

HUMAN progress has always been indicated by its methods of transit, and probably the most momentous occurrence in that wonderful story was the advent of the first wheel, away back in the dim unrecorded past. Progress of every description generally meets at first with opposition. When Mr. T. W. Collette, founder of the Ceylon Motor Transit Co., began his enterprising activities as pioneer of motor traction in Ceylon with a Thorneycroft bus, the Government was against the scheme because of the damage it was feared would be done to the roads. Mr. Collette, however, overcame that opposition by importing the "Commer" vehicles made with wheels specially constructed to prevent any possibility of damage to the island's highways; and when he eventually won the Government's sanction, his efforts for the economic development of Ceylon proceeded apace. His business, in which he had been in partnership with his brother, Mr. H. H. Collette, now Mechanical Engineer of the Colombo Municipal Council, was in 1921 formed into the Ceylon Motor Transit Company, of which Mr. T. W.

Collette is managing director; and it contributes an important part to the motor transit facilities in Ceylon. For that purpose it has a fleet of thirty powerful vehicles, including the celebrated "Brockway" motor lorries, for which it is agent, as well as the "Commer" and "Benz" omnibuses, which maintain the longest motor service in the island, extending from Borella to Batticola, on the eastern side of Ceylon.

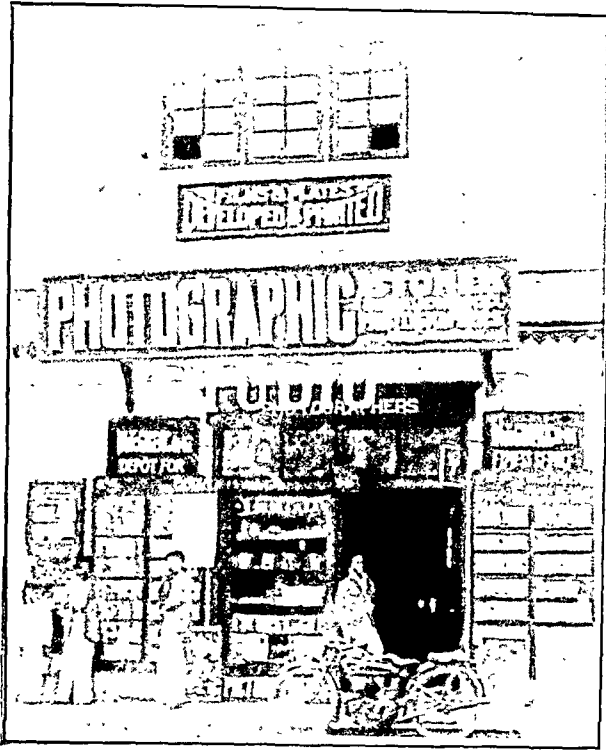
The premises of the Ceylon Motor Transit Co. have an area of about 3½ acres, and give employment to about eighty workmen, who are engaged in everything associated with repairs to motor vehicles and engineering. The company devotes special attention to the building of all kinds of motor bodies, and its stock of spare parts and accessories is of the most comprehensive character. The company has branch offices at Bandawela and Badulla. The telegraphic addresses are "Bonanza," Colombo; "Tranzor," Bandawela; and "Omnibus," Badulla. The code used is the 5th edition of the A B C.

SEAPORTS OF INDIA AND CEYLON.

JOHN and CO., Photo Artists and Importers of Photographic Materials. Head Office: Maradana.

No materials are more dependent on accuracy and suitability than those pertaining to photography, which has now developed a range of operation far exceeding its pristine demarcations. Very much has been contributed to that development by the Agfa and Ilford manufactures, which are in such

Messrs. John and Co., who are also dealers in and general importers of photographic materials of every description, which they obtain from firms of world-wide fame in London. They also operate in all branches of photography, and devote special attention to portraiture, for which they have a



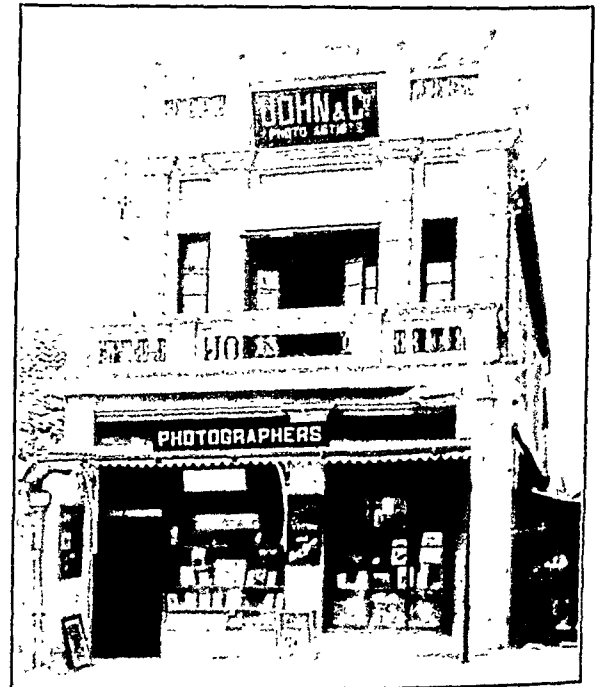
FORT BRANCH, COLOMBO.



HEADQUARTERS, MARADANA, COLOMBO.



NUWARA ELIYA BRANCH.



KANDY BRANCH.

PREMISES OF JOHN and CO.

popular use throughout the world. Year after year these celebrated goods have seemed to reach their maximum in general merit and adaptability; but every now and then they exemplify some new improvement, some clever enhancement of standard perfection; and now it appears impossible that anything further can be achieved which can add to the wonderful simplicity of modern photography and the results possible to even unskilled operators equipped with Agfa or Ilford outfits.

The agents in Ceylon for these goods are

large variety of backgrounds and accessories. Their studio at Maradana has a floor space of 650 square feet, and is admirably equipped with everything for the production of the highest class of work. Messrs. John and Co. know by long study and experience the exact psychological moment when and how to secure the expressions and attitudes best suited to their customers, and the many charming examples of their ability in that connection on view in their premises testify much more eloquently to the firm's skill than columns of

printed eulogy. Particularly noteworthy are their enlargements in black and white, sepia, and in colours, by clever artists.

Messrs. John and Co. are also manufacturers of all kinds of printing blocks. They have been established since 1919, and have branches at Kandy and Nuwara Eliya. They have also in the Fort, Colombo, another establishment devoted to the sale of photographic materials, book and

general literature, stationery, curios and fancy goods, also view books and picture postcards of Ceylon reproduced from the firm's own photos, of which they have a very large selection. Messrs. John and Co. are engaged in wholesale as well as retail trade. Their telegraphic address is "Platino," and their codes are the A B C 5th edition and Bentley's.

**G. ROBERT DE ZOYSA and CO., Successors to A. H. MARSHALL and CO.,
Merchants, Exporters and Importers, Balers, Brush Manufacturers, Owners of Estates, Fibre
and Desiccating Coconut Mills, and the CEYLON BRUSH MANUFACTURING CO.,
Fairfield House, Union Place.**

MESSRS. G. ROBERT DE ZOYSA AND CO. are amongst the largest employers of labour in Ceylon, and have between 3,000 and 4,000 persons on their pay rolls. At Madampe they have what are said to be the largest fibre mills in the island. They are also the proprietors of the Nagoda fibre mills and the desiccating factory at Kandana. Their estates throughout the island aggregate about 4,000 acres and are as follows:

- Dromoland Tea Estates.
- Maharappolla Rubber Estates.
- Anganaketiya Rubber Estates.
- Munnewa Rubber Estates.
- Galdawa Coconut Estates.
- Ganewatte Coconut Estates.
- Pannalla Group Estates.
- Kiniyama Group Estates.
- Madampe Group Estates.
- Siri Sumana Group Estates.
- Pehebiakanda Cinnamon Estates.
- Dickduwa Cinnamon Estates.

Messrs. G. Robert De Zoysa and Co. are also brush manufacturers, and operate in that connection under the name of the CEYLON BRUSH MANUFACTURING Co., which was established in 1918. They manufacture brushes of every description, and as the requisite materials are all obtained in Ceylon, it naturally follows that the firm are

able to sell their excellent brushes much cheaper than similar imported articles. The Ceylon Brush Manufacturing Co. are contractors and suppliers to the Colombo Municipality, Kandy Municipality, Colonial Stores, Harbour Engineer, Walker Sons and Co., Ltd., Hunter and Co., Colombo Hotels Co., Ltd., etc.

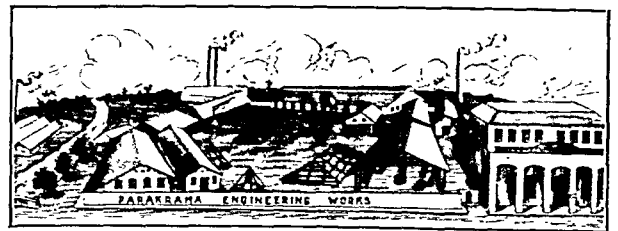
Messrs. G. Robert De Zoysa and Co. are likewise exporters of Ceylon produce, and have agencies throughout the world. The chief commodities dealt in by them are rubber, copra, coconuts, desiccated coconut, fibre of all grades, coir, yarn, cinnamon and other spices, etc. The proprietor of the concern, Mr. G. Robert De Zoysa, is the present Chairman of the Ceylon Low Country Products Association, and the firm are in a position to transact a very competitive trade.

The business of Messrs. G. Robert De Zoysa and Co. was established in 1905, and carried on under the name of A. H. Marshall and Co. until 1920, when the partnership was dissolved, and the concern was continued under its present name by Mr. G. Robert De Zoysa, who had been one of the principals of the former firm. The telegraphic address is "Wick," Colombo, and the codes used are the A B C 5th and 6th editions, Lieber's, Bentley's, Kendall's, and private.

PARAKRAMA ENGINEERING WORKS, Skinner's Road (South).

THERE is always room at the top for ability, always plenty of scope for the effort directed towards perfection in ways and means. That fact is proved everywhere in all branches of business activity by the attaining of success in the face of powerful and long established competition. An excellent example of it is manifested by the development which has taken place in the Parakrama Engineering Works. That undertaking was started in 1925 with one engineer, a clerk, and two workmen, and the monthly turnover amounted to Rs. 400. Sixteen months later its staff comprised upwards of 100 workmen, supervised by highly skilled European engineers, and the turnover had risen to more than Rs. 60,000 a month. By the time this volume is published these figures will probably be doubled, for when the writer inspected

the works the firm were making arrangements for transforming their premises into a very large



PARAKRAMA ENGINEERING WORKS.

general engineering establishment, equipped with a powerful plant of up-to-date machinery that would be able to meet every demand likely to be made upon it. As was stated in the local press,

"The success of the Parakrama Engineering Works is due to accurate workmanship, expert design, low rates and straightforward dealing. Repeated orders are its testimony."

The Parakrama Engineering Works undertake complete installations of all kinds of industrial buildings, factories, mills, aerial ropeways, hydro-electric plants, etc. They have attained particular fame for the supply and erection of bungalows of every description, in which they specialise with marked ability, and have erected these and other structures on very many estates throughout Ceylon. Besides their engineering activities they are also importers of hardware, building materials, and bungalow fittings, galvanised corrugated and ceiling sheets, iron joists and steel sections, bolts,

nuts and rivets, steam, gas, and water piping, English and Continental cement, paints and oils, motor accessories, electrical bulbs and fittings. The firm are sole agents for Tip-toptiles, Dominion case hardening powder, Himalaya roller composition, Heenen and Froude, Ltd., Manchester; Boulton and Paul, Ltd., Norwich; Armstrong and Co., Ltd., Vancouver; Condor Lamp Manufacturing Co., Venlo; and Anderson Gibb and Wilson, Edinburgh.

The founder and proprietor of the business is Mr. J. S. Parakrama, M.I.M.E., A.M.I., Min. E., who gained his engineering qualifications in England, where he had very extensive experience, including seven years with Armstrong, Whitworth and Co., Newcastle-on-Tyne.

A. P. CASIE CHITTY, General Import and Export Merchant and Commission Agent, 3a and 4, Fourth Cross Street, Pettah.

THERE is probably no Tamil family in Ceylon better known nor longer established in the island than that of Casie Chitty, who, hailing originally from Benares, India, are particularly noted for their mercantile ability. A well-known member of that family is Mr. A. P. Casie Chitty, who traces his ancestors in Ceylon back for fifteen generations, and is one of the most successful business men there. Established since 1906, he is a large importer of groceries and provisions, wine and spirits, and his name in that connection is highly appreciated amongst manufacturers of such things in Great Britain, Germany, France, Belgium, Italy, etc.

His imports of rice from India and Burma supply the requirements of estates throughout the island. From Java reach him big quantities of sugar, and in the Jampettah suburb of Colombo he has an excellently equipped factory where he manufactures all kinds of boiled sweets from the finest cane-sugar. Contiguous to that factory, Mr. Casie Chitty owns a series of warehouses known as Mervyn's Stores, built in 1924 on the

latest scientific principles for the storage of merchandise, and let out to various prominent European firms. The land occupied by him there covers an area of ten acres and is of an estimated value of ten lakhs of rupees.

Mr. Casie Chitty controls very much of the local liquor trade. He imports in bulk and his total operations are naturally on an extensive scale, including all the bottling of arrack for the Government.

Mr. Casie Chitty is the financial partner in the Central Medical Stores described in the following article, and is also a partner in the firm of Sand and Co., exporters of rubber and other produce. In the Kotehena suburb of Colombo Mr. Casie Chitty owns a large area of land which he is developing into a model settlement. At the time of writing he has built 40 houses there for the accommodation of some of the many people employed by him. Mr. Casie Chitty's cable address is "Gemini," Colombo, and the codes used by him are the A B C 5th editions, Lieber's, Bentley's, and private.

C. GOMEZ and CO., Central Medical Stores, Main Street.

IN all English-speaking countries the name most frequently given to the principal thoroughfare in town and village is Main Street. Such is the designation of the chief shopping thoroughfare in the busy Pettah district of Colombo, and prominent amongst the names there is that of Gomez. Prior to 1914 Messrs. Gomez and Co. operated as general importers and had their connections near and far. In that year, however, the concern was dissolved and one of the former partners, Mr. C. Gomez, continued business by opening the well-known establishment entitled the Central Medical Stores, where are obtainable, as might be inferred from its name, pharmaceutical requirements of every description. A considerable wholesale trade is transacted at the Central Medical Stores, and through the firm's connections at Kandy and Negombo retail chemists and druggists in Ceylon

are provided with the means of keeping their stocks fresh and pure. The establishment is a reliable place for the compounding of doctors' prescriptions, and for that important work qualified assistants are employed. In partnership with Mr. Gomez is Mr. A. P. Casie Chitty, referred to in the preceding article. The business has undergone very successful development, and now gives employment to upwards of 36 persons. From the firm's excellently got up catalogue is the following quotation which is significant of the policy by which the concern is conducted:—"The man who stands behind the counter at the Central Medical Stores is willing to stand behind the reputation of the groceries he sells. He knows that every article measures up to the highest standard of quality at low prices."

NORMAN BLANDE and CO., Brokers and Advertising Contractors to the Ceylon Government Railway, 34, Baillie Street.

Mr. NORMAN BLANDE is a gentleman of many activities, for which he is well qualified by his long residence at Colombo and his extensive experience of local trade. He was for nearly nineteen years connected with the firm of Tarrant and Co., in which he eventually became a partner and was manager of its import department. In 1926 he severed his connection with that concern and, starting in business on his own account, has made excellent progress.

Mr. Blande operates as a share, exchange, freight and general produce broker, and is adver-

tising contractor to the Ceylon Government Railway, controlling all the advertising space at 170 stations throughout the island. His service and supplies in the latter connection include permanent enamelled iron plates of all sizes and styles; and inquiries regarding the rates for these excellent publicity mediums should be addressed to him.

Mr. Blande is furthermore Member for the Fort district in the Colombo Municipal Council. His telegraphic address is "Norbla," and the codes used by him are Bentley's and Western Union.

WALKER, SONS and CO., LTD., Engineers, Prince Street, Fort.

COLOMBO is noteworthy for its excellent engineering establishments. The works of Messrs. Walker, Sons and Co., Ltd., for instance, cover an area of eleven acres and, under normal conditions, employ about two thousand men, who are engaged in the production of tea, rubber, coffee and water-power machinery, factory ironwork, roof trusses, girder bridges, steel barges, tanks, etc. The works are in direct railway communication with all parts of Ceylon, and have their own jetty to facilitate imports and exports of materials.

The business was founded at Kandy in 1854 under the name of John Walker and Co., and during the next twenty years the firm specialised in the manufacture of coffee machinery for Ceylon, Java, Southern India, and Brazil. In 1870 the coffee industry of Ceylon reached its greatest development with the exportation of more than 1,000,000 cwts. of coffee; but from that date there was a rapid decline until leaf disease finally extinguished all the coffee plantations on the island.

Whilst the planters were occupied with fresh products Messrs. John Walker and Co. were busy preparing for the removal of their workshops to Colombo, for it was recognised that with the

completion of the southern arm of the breakwater, the harbour was bound to increase rapidly in importance. It was also realised that the increasing tonnage entering it would mean corresponding increase of work in connection with steamer repairs, docking, etc., and hopes in these directions were amply justified. In this way the marine engineering side of their business helped to compensate the firm for the loss of work up country through the failure of coffee. The transfer of the workshops from Kandy to Colombo took place in 1880, and the new premises in Prince Street, Fort, were opened in 1881.

In 1890 the firm was formed into a limited liability company.

Owing to the continuous expansion of the business, the company was forced to consider the question of removing the workshops out of the Fort altogether and ultimately obtained from Government a lease of a suitable site adjoining the Graving Dock. On this site, in extent about nine acres, entirely new workshops were erected. They were formally opened on March 22, 1912.

Messrs. Walker, Sons and Co., Ltd., have branches at Kandy, Talawakelle, Galle, Ratnapura, and Bandarawela.

F. X. PEREIRA and SONS, General Importers, Indent Agents, Manufacturers' Representatives, Steamship and Insurance Agents, Ridgeway Building, Pettah.

VERY many of the great number of people who pass through Colombo are only familiar with the shopping emporiums of the Fort, and are unaware of the attractions and advantages that await the discerning in the busy Pettah district that is only a short distance away by the first road to the left from the landing jetty. That district is full of stores, meeting requirements of every description, but none of them is more worthy of notice than Messrs. F. X. Pereira and Sons', who have been established since 1889 and are very well known among the permanent residents of Colombo and throughout the island. Their attractive establishment, which gives employment to about sixty persons, is an excellent place for the supply of everything associated with a general department store, but more especially for ladies' and gentlemen's

outfitting, in which the firm have always specialised with marked success. Indeed, in that connection it is difficult to say to which sex they cater best. In their tailoring departments, giving employment to a large staff of expert workmen, the sartorial trade is administered with ability equal to that associated with the most noteworthy centres of fashionable decree.

In the old records of the business is found the interesting fact that Messrs. F. X. Pereira and Sons were specially appointed drapers to Sir West and Lady Ridgeway, when the former was Governor of the island. Lady Ridgeway was a regular customer of theirs during her husband's six years term of Governorship, and on leaving Ceylon she gave a testimonial to them, expressing her entire satisfaction with her dealings at their establish-

ment. The title of the latter, Ridgeway Building, commemorates that pleasant association.

At Tuticorin Messrs. F. X. Pereira and Sons are manufacturers of iron safes and cash chests, and also are general motor engineers handling the Dodge and Overland cars, spare parts and accessories, etc. They are likewise at that place exporters of coconut fibre, senna and other products, and importers of cement and building materials. During recent years they have developed their activities very considerably as indent merchants for all classes of merchandise, manufacturers' representatives, and general commission agents, and are agents for the following:

The Scindia Steam Navigation Co., Ltd.
Sissons Brothers and Co., Ltd., Hull.

**GEORGE STEUART and CO., Private Attorneys, Estate, Commission and Banking Agents,
14, Queen Street.**

If it were possible for any of the Dutch colonists who lived at Colombo before its capitulation to the British in 1796 to return to it now, the name of Steuart would be familiar to them, for that was the name of the gallant Colonel who commanded the victorious British force to which the island was surrendered and became part of the British Empire.

The name of Steuart has long been and is prominent and influential in local commerce. The firm so designated — George Steuart and Co. — dates its history back to 1837, and was founded by Mr. James Steuart, formerly Port Attendant at Colombo. The book written by that gentleman, *Notes on Ceylon (and its affairs during a period of 38 years ending in 1855)*, was printed in 1862 for private circulation, and contains very interesting and instructive information regarding the colony as it was in Mr. Steuart's lifetime.

The offices of Messrs. George Steuart and Co. form part of a block of buildings erected during the Dutch occupation of Colombo, and are among the few business structures that still remain as mementoes of the past.

The firm are agents for the following:—

Arbuthnot, Latham & Co., Ltd., London.
Colombo Commercial Co., Ltd., London.
Dickson, Anderson & Co., Ltd., London.
M. P. Evans & Co., London.
George Williamson & Co., London.
James A. Hadden & Co., London.
Shand, Haldane & Co., London.
Taylor, Noble & Co., Ltd., London.
William Nevett & Co., London.
Rowe, White & Co., Ltd., London.
Gillanders, Arbuthnot & Co., Calcutta and Rangoon.

FOR INSURANCE:

The Alliance Assurance Co., Ltd.
The North British & Mercantile Insurance Co.

FOR BANKERS:

Coutts & Co.
Bank of Liverpool & Martins, Ltd.
The Westminster Bank, Ltd.
Chas. Hoare & Co.
Ulster Bank, Ltd.
Bank of Montreal.
National Provincial Bank, Ltd.

John Shaw & Sons (Wolverhampton), Ltd., Wolverhampton.

Goodwin & Co., Birmingham.
British Manufacturers' Agency, Ltd., Manchester.
Lewis Banks & Co., Ltd., London.
Deutsche Einkaufsgesellschaft, m.b. H. Hannover.
Plate and Van Heusde, A. sterda.
Iida & Co., Ltd., Takashimaya, Yokohama.
H. E. Travis & Co., Manchester.
Evans and Weale, Ltd., London.
Franz Gahlert & Sohne, Barenstein.
The Universal Fire and General Insurance Co., Ltd.
The Burma Fire and Marine Insurance Co., Ltd.

The founder of the business, Mr. Francis X. Pereira, died in 1906, and since that date it has been carried on by his sons, the present partners being the Hon. I. X. Pereira, M.L.C.; R. G. Pereira; J. E. A. Pereira; J. L. Pereira; and J. R. T. Pereira.

FOR STERLING COMPANIES:

The Consolidated Estates Co., Ltd.
The Ceylon (Para) Rubber Co., Ltd.
The Duff Estates Co., Ltd.
The Deviturai Rubber and Tea Estates Co., Ltd.
The Doranakande Rubber Estates, Ltd.
The Elston Estate Co. of Ceylon, Ltd.
The Gibson Estates, Ltd.
The Glen Rubber and Tea Co., Ltd.
The Hanipha (Ceylon) Tea & Rubber Co., Ltd.
The Hardford Estate, Ltd.
The Hattangalla Tea & Rubber Estates Co., Ltd.
The Kurugama Tea Estate, Ltd.
The Kintyre Tea Estates Co., Ltd.
The Nayabedde Estate Co., Ltd.
The Standard Tea Co., Ltd.
The Sumtravalle Estates, Ltd.
The Sunnigama Co., Ltd.
The Talawakelle Estates Co., Ltd.
The Tea Estates Control Co., Ltd.

AGENTS AND SECRETARIES FOR RUPEE COMPANIES:

The Albion Tea Estates Co., Ltd.
The Arawakumbra Rubber Co., Ltd.
The Ceylon Provincial Estates Co., Ltd.
The Ceylon Rubber Co., Ltd.
The Dickapitiya Tea & Rubber Co., Ltd.
The Dickoya Tea Co., Ltd.
The Doone Vale (Ceylon) Rubber Co., Ltd.
The Easter Seaton Coconut Estates Co., Ltd.
The Gangawatta Estates Co. of Ceylon, Ltd.
The Glenanore Tea Co., Ltd.
The Govinna Rubber Co., Ltd.
The Hantane and Bollagalla Estates Co., Ltd.
The Holbrook Co., Ltd.
The Karandagama Tea Co., Ltd.
The Kataboola Co., Ltd.
The Kirklees Estate Co., Ltd.
The Knavesmire Estates Co., Ltd.
The Lucky Land Tea Co., Ltd.
The Mahanilu Tea Co., Ltd.
The Moolgama Estate Co., Ltd.
The Nahavilla Estates Co., Ltd.
The Narangoda Rubber Co., Ltd.
The Rahatungoda Tea Co., Ltd.
The Ratwatta Cocoa Co., Ltd.
The Remuna Rubber Co., Ltd.
The Ryans Estates (of Ceylon), Ltd.
The Shawlands Tea Co., Ltd.
The Stratspey Tea Co., Ltd.
The Syston Estates Co. of Ceylon, Ltd.
The Tempo Tea & Rubber Co., Ltd.
The Troop Tea Co., Ltd.
The Udagoda Tea & Rubber Co., Ltd.

ARISTON GARAGE, 240a, Steuart Place, Colpetty.

THE owner of a motor-car in Colombo is, in many respects, better off regarding service and supplies than people who live in many of the provincial towns in Great Britain and other countries. As Colombo is so far away from the chief centres of industrial production, the Ariston Garage, like its competitors, is obliged to meet the most diverse requirements, many of which, in the smaller towns in the British Isles, for instance, would be referred to the manufacturers of the cars. That necessity is the mother of invention is demonstrated in the Ariston Garage, where a plant of machinery is in operation that covers every phase of skilled workmanship in connection with automobile repairs. It is, of course, impossible here to describe the work in the various departments, and the appliances with which that work is skilfully accomplished. To do so would necessitate much space devoted to various machine tools, electric utilities, and manipulative adaptability only possible through long specialisation in distinctive operations, which in less up-to-date garages are often bungled over

by workmen with limited knowledge and experience of their trade.

Although the business has been only established since 1923, the proprietors, Messrs. A. J. van der Poorten and F. Guillaing, are motor engineering and electrical experts of extensive experience. Mr. Guillaing, for instance, is a specialist in the supply and erection of distillery plants, and at the time of writing the firm are making arrangements for launching out very largely in that connection. Their telegraphic address is "Selectmotor," and the codes used by them are the A B C 5th edition and private. They are agents for Hotchkiss, Peugeot, Sizaire Freres, Amilcar, and Unic motor-cars; Unic lorries; Ariel, Monet and Goyen motor-cycles; Marchal and Ducelliers electric equipments; L'Aster lighting sets; Tudor batteries; Marvel mascots; Wanguier electric motor pumps; Universal wood machine, "Balleydier" and crude oil engines. The Ariston Garage is also service station for the Jowett, Paige, Bean, Adler, Opel, Benz, Swift, Maccar, Fafnir, and Lalicorne cars.

CARGO BOAT DESPATCH COMPANY.

THE business of the Cargo Boat Despatch Co. was established in 1866, and was taken over in 1915 by the late Mr. P. Cosmas, who amalgamated with it the undertakings of the Colombo Water Boat Co. and Passe and Co. The Cargo Boat Despatch Co. has a fleet of 150 boats of all tonnages, the average capacity being 40 tons each, also 3 steam tugs and a large fleet of motor lorries for transport work. It has its own boat-building yard at Peliyagoda, near the mouth of the Kelani River, and repairing yards at Kochchikade.

The company operates as water suppliers, coal

contractors, and stevedores, and lands cargo for various steamship lines. It also ships cargo to every line of steamers calling at the port of Colombo. There is also a forwarding branch attached to the business. The office premises of the company are leased from the Government. The partners in the company are Messrs. H. P. Cosmas, A. Zarephe, and John Cosmas. The manager is Mr. P. Muller. The telegraphic address is "Despatchco," Colombo, and the code used is the A B C 5th edition.

JOHN COSMAS, Importer, Exporter, and General Commission Agent, 17, Baillie Street.

THE name of Cosmas has long been associated with business activity in Colombo. The gentleman indicated at the head of this brief reference, Mr. John Cosmas, is a co-proprietor of the Cargo Boat Despatch Co. referred to in the preceding article. In 1918 he established a general merchandising business which is making excellent progress. Mr. Cosmas is an importer of piece-goods, sugar, hardware, and the infinity of things that come under the term of general sundries. As an

exporter of Ceylon produce Mr. Cosmas handles chiefly rubber, copra, desiccated coconut, and cinnamon. He is agent for Cussons and Sons, manufacturers of soap and perfumery, London, and Bontwevirij Insulinde, manufacturers of sarongs and comboys, Hengelo, Holland. The joint managers are Messrs. Chr. Christodoulis and S. Tiverios. His telegraphic address is "Johncos," and the codes used by him are the A B C 5th and 6th editions and Bentley's.

H. P. COSMAS and CO., General Merchants and Commission Agents, 2, Canal Row.

MESSRS. H. P. COSMAS AND CO. are exporters of all kinds of Ceylon produce, but chiefly cinnamon, copra, desiccated coconut, coconut oil, and cocoa, while as importers their principal lines are hardware, tools, and motor accessories. The founder

and proprietor of the business is Mr. H. P. Cosmas, who is one of the directors of the Cargo Boat Despatch Co. The firm's cable address is "Apollo," and the codes used by them are Bentley's and the A B C 5th and 6th editions.

E. G. NEGRIS and CO., Ship-chandlers, Import and Export Merchants, York Street.

ONE of the most recent of the commercial buildings in Colombo is that of Messrs. E. G. Negris and Co., which was completed in July, 1927. That firm are amongst the most notable of the local ship-chandlers, and supply fresh meat, vegetables, and everything pertaining to the commissariat of a steamer. They are also importers of piece-goods from England, Germany, Switzerland, and

France, and also of the French "Lallicorne" motor cars. The business was founded about a quarter of a century ago by its present proprietor, Mr. E. G. Negris, who is ably assisted in its management by Mr. A. C. Jordanidis. Messrs. E. G. Negris and Co.'s telegraphic address is "Negrisco," Colombo, and the codes used by them are the A B C 5th edition and Bentley's.

W. E. BASTIAN and CO., Paper Merchants, Stationers, Printers, etc., 13, Norris Road, Pettah.

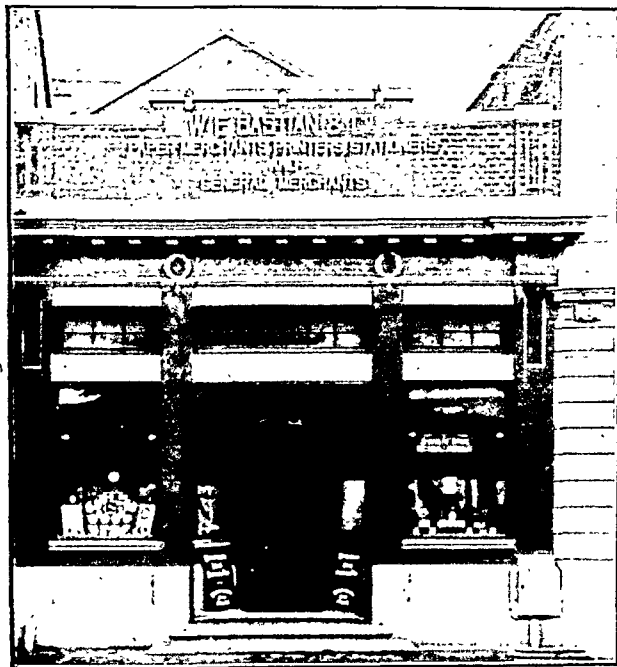
THE great range in the qualities of paper supplied by Messrs. W. E. Bastian and Co. gives an idea of the remarkable development which has been attained in the paper-making industry, especially since 1862. Prior to that date paper was made from rags. Thereafter experiments began to

use, as exemplified by the supplies of Messrs. W. E. Bastian and Co. That firm's assortments of general stationery and writing materials of every description are equally impressive, and are imported by them from the leading manufacturers in Europe and America. Messrs. W. E. Bastian and Co. are also dealers in all kinds of fancy goods, gramophones, perfumery, etc.

They operate very commendably as printers, and in their works in Fourth Cross Street is executed printing of every kind in Sinhalese and Tamil as well as in English, including beautiful colour work. An excellent example of their ability in that direction is afforded by the *Buddhist Annual of Ceylon*, which is always printed and published by Messrs. W. E. Bastian and Co. The firm are likewise noteworthy for their operations as manufacturing stationers, bookbinders, and machine rulers.

The business was started in 1904 in a very small way by Mr. W. E. Bastian, who had been for some years previously manager of a similar concern in Colombo. As time passed his undertaking developed very successfully, and now gives employment to about 150 persons. The two-storey building, in Norris Road, forming his retail store and offices, is his own property. It was erected for him in 1924, and is larger than might be inferred by its external appearance in the accompanying photographic reproduction.

Messrs. W. E. Bastian and Co.'s telegraphic address is "Paper," Colombo, and they are sole agents in Ceylon for the celebrated Carter's inks and adhesives, and the "Webco" gramophones. They are sole importers into the island of the well-known "Three Star" notarial paper, Charles Walter and "Lion" ledger account book papers and "Sri," "Lanka," and "Webco" writing and printing papers."



PREMISES OF W. E. BASTIAN and CO.

develop the use of fibrous materials in the form of chemical pulp. To-day raw materials of that character are prepared in enormous quantities, and the evolution of the paper-making industry has been accompanied by the invention of ingenious machinery that contributes very greatly to the many different qualities and varieties of paper now in

THE COLOMBO SHIP SUPPLY CO., Ship-chandlers, Provision Dealers, 44, Baillie Street.

It is but natural that at a great port like Colombo the trade of the ship-chandler should be well represented. Amongst the firms there engaged in that connection is The Colombo Ship Supply Co., whose services embrace everything associated with their vocation—provisions, water, etc. Their business was established in 1912 under the name of F. E. Porritt and Co., and carried on as such

until 1925, when it assumed its present designation. The proprietor is Mr. F. E. Porritt, who is the only European operating exclusively a ship-supply concern at Colombo. The telegraphic address is "Colsupco," and the codes used are Scott's 10th edition, A B C 5th edition, Bentley's, and Standard. The company are agents for the Imperial Merchant Service Guild.

HILLMAN, BECK and CO., Importers of Musical Merchandise; Tuners, etc., Union Place.

THE handsome building in which Messrs. Hillman, Beck and Co. are located was formerly a private residence, and when they removed there from their original quarters in the Consistory Buildings, Front Street, they converted it into an admirable place for the activities of a business devoted in a very special manner to the attraction and enhancement of home life. A home without music, for instance, falls short of the ideal; and as music is the most spiritual of all the arts, its effects on the character and happiness of people are not to be measured in terms of material things. In that connection it would be very interesting, were it possible, to know the things that have resulted through their pianos, organs, and other instruments in homes throughout Colombo and, indeed, in all parts of the island. Messrs. Hillman, Beck and Co. are importers of musical merchandise of every description, and their supplies include, therefore, the most comprehensive selection of all the means for the creation of sweet sounds by the breath or the fingers, the two ways by which the intangible infinity of

music is rendered discernible to the physical sense. They are as ready to equip a complete orchestra as to meet any specialised requirements in pianos and organs, and are agents for the "Rogers," "Hopkinson," and "Brasted" pianos, all of English manufacture.

They are the only firm in Ceylon operating in connection with church organs, and devote special attention to the skilful execution of repairs of all kinds and also to tuning.

Each of the partners is a Member of the Piano-forte Tuners' Association of London. They comprise Messrs. H. L. Hillman and R. C. P. Beck, who learned their trade with Chappell, of London, and P. Silverman, who was trained with Collard and Collard, London. They all went to Ceylon in the employ of Messrs. H. W. Cave and Co., and left that firm in 1922 in order to start in business for themselves.

It may be mentioned that the firm's premises are very frequently used for musical recitals and concerts, which are much appreciated by the local musical community.

H. DON CAROLIS and SONS, Furniture Manufacturers and Complete House Furnishers, General Importers and Commission Agents, 52-55, First Cross Street, Pettah.

THE business of Messrs. H. Don Carolis and Sons has the distinction of being the largest of its kind in Ceylon, if not in the entire Orient, and their enterprising specialisation in the manufacture of furniture and the supply of household equipments has gained for them the term of the "Maple" of the East. In the firm's showrooms in First Cross Street and Keyzer Street, Pettah, covering an area of about an acre, with a window display on the ground floor of about 300 feet, are furniture and general household requirements of the most comprehensive description, from the cheapest equipment for the humblest homes to the rich and exquisite woodwork, upholstery, and objects of art for the largest of mansions. Besides the firm's own manufactures, chiefly in native woods like nadun (Ceylon walnut), satin, ebony, calamander, and jak—the latter assuming with age a rich mahogany colour—Messrs. H. Don Carolis and Sons are large importers of rosewood and bentwood furniture, lamps, crockery, bedsteads, spring mattresses, clocks, hardware, carpets, plated ware, pianos, gramophones, etc., being in fact universal providers in all that relates to domestic and office equipment. Their productions are made at their excellent steam furniture works in Slave Island, which are equipped with the latest Western machinery.

The manufacture and sale of furniture formed the initial activities of Messrs. H. Don Carolis and Sons; and while they are still so largely engaged therein, their business has at the same time developed very considerably in other direc-

tions. Thus, they are extensive importers of cycles, tools, agricultural implements, cement, galvanised iron, general hardware and building materials. They have also in Pettah a motor garage, where repairs of all kinds to cars are promptly and skilfully executed, and are agents for the American "Gardner" and "Elcar" cars. The motor department is being developed considerably, and is in charge of one of the founder's grandsons, Mr. Rajasinghe Hewavitarne, who followed his long college career in England by a course of study in the celebrated Humber works, Coventry.

Messrs. H. Don Carolis and sons are agents and secretaries for the Ceylon Safety Matches Manufacturing Co., whose works in Bambalapitiya, giving employment to about 200 persons, produce on an average about 15,000 gross boxes of matches per month. They are also agents and secretaries for the Low Country Food Products, Ltd., and agents for the famous Rudge-Whitworth cycles.

The business of Messrs. H. Don Carolis and Sons gives employment altogether to upwards of 750 persons, and was started in 1860 by Mudaliyar Don Carolis Hewavitarne, who died in 1906 at the age of 73. He was a gentleman of pure Sinhalese and Buddhist origin and culture, having received his education at the Buddhist Monastery of Raja Maha Vihare, near Matara, in the south of the island. He was an expert in astrological mathematics, and was the first to print the Sinhalese *Astronomical Year*

Book. A student of Brahminical and Buddhist spiritual literature, he was one of the founders of the Vidyodaya College—an institution for training Buddhist monks—which he supported throughout his life. He was also a large-hearted, open-handed man, and his munificence to the poor, the sick, and the needy eventually came to the notice of the Ceylon Government, which honoured him with the rank of Mudaliyar. The last act of his life was the setting apart of Rs. 30,000 for the spread of industrial education in Ceylon among Buddhists by sending suitable Buddhist young men to Japan to learn Japanese industrial methods, from which resulted the establishment of the Ceylon Safety Matches Manufacturing Co., already referred to, the Hewavitarne Weaving School at Rajagiriya, where weaving and kindred subjects are taught, and the Hewavitarne Dyeing School at Peliyagoda. Both the latter institu-

tions are managed by past scholars of the scholarship founded by the Mudaliyar, who thus revived in the island the arts of weaving and dyeing that had been in decadence for many years.

After the Mudaliyar's death the business was carried on by his two sons, the late Edmund and Simon Hewavitarne. The latter, Mr. Simon Hewavitarne, left a bequest for the printing and free distribution abroad of a series of Buddhist literature, and that series has, in the opinion of Western scholars, contributed very largely to the satisfactory state of orthodox Buddhism. The business is now managed by the last surviving son, Dr. C. A. Hewavitarne (ably assisted by his brother-in-law, Mr. J. Moonesinghe) in partnership with Messrs. Neil Hewavitarne, R. Hewavitarne, Sanath Moonesinghe, Kumaradasa Moonesinghe, Piyadasa Moonesinghe, and Daya Hewavitarne.

P. C. FERNANDO and CO., Contractors, Stevedores, Ship-chandlers, 24, Upper Chatham Street.

WHEN the business of Messrs. P. C. Fernando and Co. was started under the name of H. P. Fernando and Co., about half a century ago, the sailing ship still retained the romance and glamour of the sea, and the premises of the firms who then specialised in meeting ships' requirements were certainly very interesting, for their stocks were much more individualistic and suggestive of the ocean than those which pertain to the ship-chandlery trade in these greatly changed times. Some of the old establishments in question, which the writer remembers, included in their wonderful assortments articles that were always associated with life on the ocean wave—shapely figureheads, guns, cutlasses, masts, cordage, sails, compasses, canned goods, fruits, etc. Many changes have, therefore, taken place in Messrs. P. C. Fernando and Co.'s vocation since the "White Wings of the Sea" still carried much of the world's merchandise, and had not been ousted by

the prosaic but more utilitarian steamers. Their business, however, has always kept in line with changing conditions, and they are ever ready, as they have always been, to supply at the shortest notice, canvas, rope, deck and engine stores, water, fresh meat, provisions, etc. The firm are contractors to the Orient Line, Glen Line, Clan Line, Dollar Steamship Co., Osaka Shosen Kaisha, Furness, Withy and Co., etc., and reference may be made to Messrs. Whittall and Co. and James Finlay and Co., Ltd., Colombo, in respect of the firm's steamship connections. The partners are Messrs. P. Charles Fernando and A. R. Fernando. Their telegraphic address is "Stebash," and their codes Scott's 10th edition and the A B C 5th edition. Messrs. P. C. Fernando and Co.'s agents in England are Ross, Schoefield and Co., Ltd., 15, Brunswick Square, Liverpool.

THE COLONIAL MOTOR AND ENGINEERING CO., LTD., 91 and 93, Union Place.

IN 1909 the motor vehicle was only in its infancy in comparison with its present condition and vast trade, and the motor cars of that period in Ceylon, amusing in their crude capacity and appearance when contrasted with those of the present day, gave little indication of the great development which was to be effected in their manufacture. In the year mentioned the nucleus of The Colonial Motor and Engineering Co.'s business was formed as a small concern devoted more especially to the repair of cycles, which at that time were still triumphant on the roads of the world. Soon after it was established, the company imported one of the Fiat motor cars, and with the advent of that 40 h.p. vehicle, the character of the undertaking was altered into har-

mony with the growing demands of the new transportation that was doing and has done so much for the development of the industries of Ceylon.

The story of the phenomenal expansion of the motor industry has no more interesting and impressive example of the universal recognition of fine workmanship in that connection than the story of the Fiat factory at Turin. That great establishment was started in 1900, and the cars produced there soon won such remarkable successes in racing competitions, and proved so eminently efficient under tests of every description, that they became in great demand in all parts of the world. So much indeed has their popularity grown that the Fiat factory has the distinction of possessing the largest building in the world devoted exclu-

sively to the manufacture of motor cars. That establishment, one of the series comprising the Fiat works, gives employment to close on 20,000 workmen, and has on its roof a testing track three-quarters of a mile long. The Fiat cars are to be found wherever there exists the desire for superiority in all the details that contribute to comfort, speed, durability and appearance in the construction of motor vehicles. In Ceylon, as in all other countries, the Fiat cars have demonstrated their wonderful adaptability to every road and climatic condition. The exclusive agents for them in the island have always been and are The Colonial Motor and Engineering Co., Ltd., whose works in Union Place, employing about 100 persons, are popular for the skilful manner in which all the work there is performed, including repairs and the building of motor bodies of every description. At the time of writing, arrangements are being made for the transformation of the entire premises into motor works on a scale of

very considerable magnitude. This will include a two-storeyed workshop which will be one of the largest of its kind in Ceylon. Besides the works in Union Place, the company has in Cotta, on the outskirts of the city, another establishment devoted chiefly to the supply of petrol and service to the 'bus traffic of that district.

The Colonial Motor and Engineering Co., Ltd., is the special service depot for the Essex and Singer cars, the sales of which are handled by the Essex and Singer Agency, and for these, as well as for the Fiat cars, it keeps a very comprehensive stock of spare parts and accessories. The managing director of the company is Mr. F. J. de Saram, who has been associated with it since 1919, and to whose able control is due the successful development which the concern has since attained.

The company's telegraphic address is "Menco," Colombo, and the code used is Bentley's.

KENNEDY and CO., Importers of Boots and Shoes, "Times" Building.

THE name of Kennedy in Colombo is a popular association of footwear, and it has become so because of the exclusive specialisation devoted in the Kennedy store to boots and shoes and hosiery to match. In that respect the establishment differs from all other stores in Ceylon, and is one of the most noteworthy concerns of the kind in the Orient. Specialisation makes for increased knowledge and skill in any direction, and in Messrs. Kennedy and Co.'s establishment it is very apparent to people able to appreciate the difference between merchandise collected without discrimination for sale at the greatest profit and

that which is the result of continual attention directed to everything pertaining to comfortable fit, elegant appearance, and durability in footwear. It is that knowledge which is at the back of Messrs. Kennedy and Co.'s importations from the leading sources of supply in England, France, Switzerland, America, etc., for the firm know footwear better than anything else, and Mr. Alexander Kennedy, the principal, has spent his career in all branches of the trade. Mr. Kennedy opened his present store in 1920, and its trade has developed considerably.

C. S. ANTONY and CO., Exporters and Importers, Chartered Bank Building.

THE influence of Messrs. C. S. Antony and Co. in local trade is far reaching, and their warehouses and mills, occupying an area of about seven acres and giving employment to about 500 persons, are amongst the largest establishments of the kind in Colombo. At these impressive premises are handled all the products of Ceylon; but special attention is paid by the firm to tea, which they bulk and packet and ship on an extensive scale under their own labels registered in Europe and elsewhere. Each of the large tea exporting houses has some characteristic in its activities peculiarly its own. Thus while Messrs. C. S. Antony and Co. supply many markets, they are exceptionally prominent in the tea trade of Egypt, and to that country as well as to the Levant and South America they ship most of their tea.

Messrs. C. S. Antony and Co. are likewise large exporters of coconut oil, copra, plumbago, etc.; while as importers their chief commodities are

liquor, piece-goods, momi tea chests, hardware, and building materials.

The business is an eloquent testimony to the enterprise and ability of its founder and proprietor, Mr. C. S. Antony, J.P., who started it in 1886 in a small way. To-day the firm are known throughout the world and have agencies in London, Marseilles, Hamburg, Barcelona, Bilbao, Genoa, Cyprus, Port Said, Suez, Alexandria, Cairo, Malta, Suakim, Abyssinia, Zanzibar, Mombassa, Lama, Djibouti, Aden, Bombay, Karachi, Penang, Singapore, Shanghai, Tokyo, Osaka, Yokohama, Sechelles, Madagascar, Persian Gulf, Honolulu, San Francisco, Chicago, New York, Boston, Seattle, St. John's, Buenos Ayres, Wellington, Melbourne, Valparaiso, and other parts of the world. Their telegraphic address is "Elephant," Colombo, and the codes used by them are the A B C 4th and 5th editions, Lieber's, and Bentley's.

ARMSTRONG'S TOURIST AGENCY, Church Street and York Arcade, Fort.

No country offers greater diversity of beautiful scenery than Ceylon, and for the many thousands of people who visit Colombo every year, but only make a brief stay at the port, Armstrong's Tourist Agency provides a service worthy of the highest commendation. Established in 1920, this excellent business, under the personal direction of its founder and proprietor, Mr. C. D. Armstrong, is utilised by Government House when occasions arise for guests of that establishment to tour the island. Accordingly Armstrong's Minerva Service has conveyed many celebrities about Ceylon, including the King and Queen of the Belgians, the Crown Prince and Princess of Sweden, Prince George, etc.

It is very important that visitors to Colombo should avoid the unreliable cars and drivers with whom they may be pestered on landing. The roads throughout Ceylon are uniformly good, but the enjoyment of travelling over them in the Armstrong Tourist Agency's cars is greatly enhanced by the comfort of the vehicles and the absolute reliability of the chauffeurs. Moreover, the latter all speak English, and are by years of service competent to act as guides to the island. The fleet consists of 80 modern cars—five and seven seaters—and is utilised by most of the shipping lines, as it is recognised by the passenger agents that only thoroughly reliable service must be provided for local excursions and day trips to Kandy.

If the steamer remains at Colombo for nine hours or more, the opportunity should not be missed of visiting Kandy. Situated 1,600 feet above sea level, amid scenery of indescribable beauty, the capital of the last of the Kandyan kings offers attractions to the tourist elsewhere unequalled. The motor drive of 3½ hours, at small expense, begins with the low country, where the scenes of Ceylon village life are very interesting and in many respects unique. Entering the moun-

tains from the fiftieth mile, the air becomes cooler, while the scenery during the last part of the journey is beyond description. Other longer or shorter tours can be arranged, notably the one to Mount Lavinia for the delightful bathing at that popular place.

The cable address of Armstrong's Tourist Agency is "Awake," and the codes used are Bentley's and private. The firm is agent and correspondent in Ceylon for the following:

Raymond & Whitcomb Co., U.S.A., Tours and Cruises.

Frank Clark, U.S.A., Tours and Cruises.

Edward Grey's World Tours.

Hudson Motor Car Co.

Burns, Philp & Co., Ltd., Australia, Tours.



PART OF FLEET OF 80 MOTOR CARS OWNED BY ARMSTRONG'S TOURIST AGENCY.

Macdonald, Hamilton & Co., India-Ceylon Tours.

H. Middlebrook, Ltd., U.S.A.

John Hamilton & Co., Tours.

William Allison & Co., Tours.

Australia Travel Service.

Frame's Tours.

International Tours.

Gillespie, Kinports & Beard's World Tours.

Northern Assurance Co., Ltd.

Dean & Dawson, Ltd.

Geo. Lunn's Tours.

T. S. SABAR and CO., Import and Export Merchants and Commission Agents, 45, Keyzer Street.

Like many other important things tersely expressed in popular phraseology and conception, the term "piece-goods" covers one of the greatest departments of commerce and industry. Textiles, or woven materials! Consideration of the vast range of goods embraced therein, and also of the overwhelming variety of designs in which they are made, the infinite variety of their chromatic effects, the endless difference in quality and texture, and the continual multiplicity of standard pattern and idiosyncrasy throughout all the wide field presented by such necessitous materials, gives appreciation of the knowledge and experience necessary for the successful management of a business like that of Messrs. T. S. Sabar and Co., who are amongst the leading importers of piece-goods in Ceylon, and through them many retail merchants throughout the island obtain their supplies.

Messrs. T. S. Sabar and Co. are also importers of hardware, fancy goods, and general sundries. Another important section of their business is represented by their fibre mills, St. Joseph's Stores, Grand Pass, Colombo, where they employ a large number of persons. They are exporters of fibre, desiccated coconut, copra, coconut-oil, tea, cocoa, cinnamon, papaine, citronella-oil, etc., and are agents for Atkinson's celebrated perfumery, the Bata shoes of Zeeho Slovakia, and Muller, McLean, and Co., shippers of American goods, New York.

The proprietor of the business, Mr. T. S. Sabar, established it in 1917, but had been, during the preceding quarter of a century, engaged with various other local firms, so that he has had a long and varied experience of commercial conditions and potentialities in Colombo.

THE CEYLON MOTOR COMPANY, No. 23, Colpetty.

THE company in Belgium manufacturing the celebrated Minerva motor cars began their operations at the commencement of the automobile industry in 1897, and their various models have always been an epitome of the latest advances in scientific invention and quality of workmanship. That is why every Minerva owner is proud of his possession. He appreciates its easy handling; he likes the smooth and silent power output of the engine; and he delights in its safe docility and robustness. If some competition should be held amongst motor experts as to the car most nearly approaching perfection, it is certain that the Minerva would be well to the forefront amongst the choice of such experts. Eloquent testimony as to the high esteem in which the Minerva cars are held may be indicated by the fact that several sovereigns, high Government officials and other persons of exceptional status utilise them year after year. In Ceylon they are sold by The Ceylon Motor Co.,

who have also happily combined with them the sale of the British Vulcan lorries, busses, and other heavy transport vehicles.

The business of the Ceylon Motor Co. was established in 1907 under its present name, which was subsequently changed to Ceylon Motor Co. (Lover Bros.), chiefly in connection with the letting out of cars on hire; but with the development of its sales and other departments, the hiring section was sold and is now operated by another firm. Thereafter the original designation was resumed.

The company's present handsome premises in Colpetty were built in 1925, and are admirably adapted for their purpose, which includes repairs of all kinds to all makes of cars. The partners are Messrs. R. R. B., A. E. B., and F. B. B. Lover, and the telegraphic address is "Lover," Colombo.

A. SANKAR IYER, Manufacturers' Representative and Agent, 5, Main Street.

THE ramifications of modern commerce have developed enormously, and all the markets of the world are intimately related and upheld very influentially by manufacturers' representatives and agents, such as Mr. A. Sankar Iyer, through whose services merchants in Ceylon obtain their supplies of goods famous everywhere, as, for instance, Peak, Fream and Co.'s biscuits, Pears' soap, and C. and E. Morton's groceries and preserved foods, for which he is agent. Mr. A. Sankar Iyer is very well known and esteemed in business circles in Colombo, where he has been

engaged in commerce for a quarter of a century. From 1908 to 1927 he was manager of the business of A. V. R. A. Adycappa Chetty, referred to on page 486. He is, therefore, thoroughly well versed in local mercantile conditions and potentialities and excellently qualified to look after the interests of the firms whose affairs in the island are entrusted to him. Mr. Sankar Iyer's telegraphic address is "Watch," Colombo, and the codes used by him are the A B C 5th and 6th editions, Bentley's, and private.

CEYLON AUTO CARRIERS COMPANY, Hyde Park Corner.

At Hyde Park Corner, opposite to the magnificent old banyan tree which is one of the sights of Colombo, are the premises of the Ceylon Auto Carriers Co., covering an area of about an acre and a half, and giving employment to about 230 persons. That important establishment is an excellent illustration of the great development which has taken place in the local motor car trade, and the facilities and resources which have been evolved to meet its requirements.

Garages in the United Kingdom are usually of small dimensions, with simple equipment and minimum stock, because of their comparative proximity to the great centres of actual production. In Great Britain, therefore, similar necessity does not exist as in Ceylon for establishments so comprehensive in their service and supplies as that of the Ceylon Auto Carriers Co., where work is done that embraces the whole range of motor engineering. The thorough manner in which repairs of every description are performed there testifies eloquently to the efficiency with which the business is conducted.

The premises have recently undergone complete remodelling and transformation, and the many

visitors who go to Hyde Park Corner to see the famous tree there are, after their inspection of it, provided with a very interesting motor exhibition in the company's large and handsome new showroom, which has a frontage of 210 feet. The magnificent plate-glass windows and other appointments were imported from England. The cars displayed in their glory of shining enamel and electro-plate provide interesting comparisons in appearance and capacity, and include the Rugby, Flint, Locomobile Junior 8, Reo, Darracq, Clement Talbot, Panhard, and Swift vehicles and the Stewart motor trucks, for which the firm are agents.

The Ceylon Auto Carriers Co. operate also as transporters of goods of every description, and are Government mail carriers. Although only established in 1924 the business has grown very considerably, thanks to the ability brought to bear on all the details of its administrative and executive departments. There are branches of it at Haputale and Hatton. The company's cable address is "Dandico," and the codes used are Bentley's and the A B C 6th edition.

SEAPORTS OF INDIA AND CEYLON.

A. Y. DANIEL and SON, Auctioneers, Brokers, Appraisers, and Commission
19, Baillie Street.

THE large and handsome office buildings which have been erected during recent years in Colombo, especially in the principal European business district called the Fort, have entirely changed the appearance of that place from what it was when the business of Messrs. A. Y. Daniel and Son was founded in 1880. At that time the local thoroughfares still retained the quaint and picturesque aspects of the past, and life in the then little capital of Ceylon was more leisurely and enjoyable than it is in these days of vast development and competition in every department of human activity. Nevertheless, Baillie Street, where Messrs. A. Y. Daniel and Son have been located since the commencement of their business, is still reminiscent of Colombo as it was, and through the doors of that firm's premises, formerly the local branch of the National Bank of India, Ltd., come and go goods and chattels of the most varied description, ranging from the latest productions of the world's chief sources of supply to rare and interesting articles that were prized possessions when the flag of Holland fluttered on the ramparts of the Fort in the eighteenth century. An establishment like that of Messrs. A. Y. Daniel and Son is always interesting to the discerning eye and understanding mind, and many excellent bargains may be obtained at their auction sales, when are disposed of, to the advantage of everyone concerned, anything that can be regarded as collateral for cash.

Messrs. A. Y. Daniel and Son of landed estates, etc., for appraise all kinds of inventories, and other moveables are purchase valuation. They negotiate loans on goods entrusted to them for and also act as general house agent. A noteworthy department of their business is their importation of milch cattle and elsewhere.

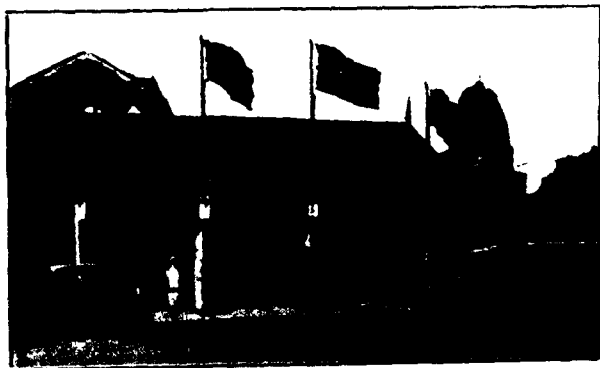
Mr. A. Y. Daniel, the founder is a Fellow of the Auctioneer Agents' Institute of the United Kingdom well known amongst all classes of society. His eldest son, formerly with him, Capt. A. R. Daniel, through the effects of the wounds received in the Great War. His Lieut. R. Y. Daniel, served in the Oxford University, was wounded and is now Police Magistrate at Kandy. His youngest son, Mr. E. M. Daniel, in the Public School Battalion, London, and is at present employed in Office, London.

In partnership with Mr. Daniel Vandersmaght, of the Ceylon Rifle Regiment in England and France.

The firm's telegraphic address is Colombo.

M. E. OTHMAN and SONS, Wholesale and Retail Grocers and Provision Merchants
Adjoining Belfry, Pettah.

THE grocery and provision trade differs from many other departments of service and supply by reason of the fact that the goods by which it is sustained are prime necessities of life, and must, therefore, be provided despite all commercial depressions,



PREMISES OF M. E. OTHMAN and SONS.

strikes, wars, and other happenings. That fact is eloquently demonstrated by the business activities of the firm operating under the name of M. E. Othman and Sons, the well-known wholesale and retail provision merchants, whose premises, adjoining

the Belfry, in Pettah, are the source from which are obtained the supplies for innkeepers throughout Colombo and Ceylon. They reach out to the world's best sources of supply and place before their numerous customers many dainties that a few years ago were unknown, or had not evolved their present character and get-up. The names and trade-marks are to be seen on the boxes and canisters of products with which the Othman stores are supplied, and amongst them are those of Rowland, Gray, Dunn and Co.'s biscuits, the commodities of J. H. Newbaur of San Francisco, for whom, as well as for N. Messrs. Othman are agents.

The firm are also importers of all kinds of medicines, toilet articles, etc.; and on their premises at the Belfry they have obtained 4th Cross Street.

The business was started in 1908 by a man whose name it bears, and in partnership with him is his son, Mr. M. A. Othman. There is also Mr. S. M. Pillay, who has been connected with the concern for many years. The firm's telegraphic address is "Aduam," and they are Bentley's, A B C 5th edition, and [

SEAPORTS OF INDIA AND CEYLON.

C. JINASENA and CO., Wijaya Engineering Works, 41-45, Hunupitiya Road.

MESSRS. C. JINASENA AND Co. are concerned with making things new, which covers a very great range of sins of omission and commission by people who forget, or are negligent, or are given to lines of least resistance or the postponement of necessities indefinitely until breakdowns occur that result in much inconvenience and loss of time and money and opportunity. The mechanical repairs which Messrs. C. Jinasena and Co. are called upon to execute are exceedingly varied; but by long experience they are well qualified to carry through everything in that connection committed to their trust. They know with minute understanding what it is that makes, or does not make, the wheels go round, and hold themselves in readiness at all times to undertake contracts pertaining to the production and erection of factory

plants of all kinds. The firm are specialists in mining machinery, and are noteworthy also in the manufacture of everything associated with water-works and accommodation requirements for coolies on estates, etc. Their premises, entitled the Wijaya Engineering Works, are excellently equipped for the rapid as well as accurate manipulation of metals; and the articles produced in their iron and brass foundry are very comprehensive.

The business was established in 1905 by its sole proprietor, Mr. C. Jinasena, A.M.I.Mech.E., and has developed well. There is a motor department of it at 2, Park Street and Hunupitiya Road, and a London office at 194-200, Bishopsgate, E.C. The firm's telegraphic address is "Sinha," Cincin Gardens, and their codes are the A B C 5th edition, Bentley's, and private.

J. LAZARUS ROCHE and BROS., "Silk Palace," 104, Main Street, Pettah.

MAIN STREET, Pettah, is one of the busiest thoroughfares in the Orient, and one of its most noteworthy establishments is the "Silk Palace" of Messrs. J. Lazarus Roche and Bros., which is ever a source of attraction to people desirous of goods that are not likely to be found duplicated anywhere else. While operating as general drapers and milliners, Messrs. J. Lazarus Roche and Bros. have become famous for their specialisation in silk, and the stock of that material to be found in their premises is well calculated to meet the most fastidious requirements—silk in every shade and texture for purposes innumerable. There it is, waiting the discerning—those who know exactly what they want, and will not be put off with inferior substitutes. The very large range of silk kept by Messrs. J. Lazarus Roche

and Bros. provides an interesting and instructive demonstration of the many varieties of that material now on the market.

The firm have been established since 1894, and the partners are Messrs. M. Roche and Bonjean Roche. At Kandy they have a branch which should be inspected by visitors to that town, who will doubtless find something specially attractive and appealing amongst the allurements of its stock. The firm's telegraphic address is "Lazaru," and they use the 5th edition of the A B C code.

Mr. Bonjean Roche operates also as an importer of cotton and silk goods and sundries as well as an exporter. He is desirous of representing first-class firms, and inquiries in that connection should, therefore, be addressed to him.

THE NATIONAL MOTOR ENGINEERING WORKS, 107, Union Place.

THERE are so very many excellent cars now on the market that it is very difficult to select one with the absolute assurance that it is the best outlay for the money expended. Amongst the most famous are the Bianchi and Citroen cars, for which the sole agents in Ceylon are The National Motor Engineering Works. The Bianchi factory was established in 1885, and since 1890 has been engaged in the production of motor vehicles of only the highest grade, which is substantiated by the character of the cars bearing that celebrated name. The fact that His Holiness Pope Pius XI selected one of them for his personal use, after careful consideration of the merits of the many other makes of cars, is a lead that others can follow very advantageously.

The Citroen cars are rapidly increasing in popularity throughout the world, which is not surprising in view of their brilliant record under the

severest tests. To the Citroen car belongs the distinction of being the first motor vehicle to cross the Sahara Desert. Models of these two celebrated makes may be seen in the premises of The National Motor Engineering Works, where every facility exists in men and machinery for the rapid execution of repairs, as well as a full assortment of Bianchi and Citroen spare parts.

The National Motor Engineering Works was started in 1911 by Mr. V. Tradigo, the present proprietor, under whose able direction it has undergone very successful development. Mr. Tradigo is an Italian motor engineer, of great ability, and has been engaged throughout his career in the motor trade.

The firm's telegraphic address is "Aero," Colombo, and the codes used are A B C 5th edition, Bentley's, and private.

MARTINUS C. PERERA and SON,
Scientific Instrument Repairers, Electro-platers, Vulcanisers, etc., 20, Union Place.

NOWHERE in Colombo is more wonderful and intricate work performed than in the premises of Messrs. Martinus C. Perera and Son, who repair all kinds of scientific instruments, such as barometers, aneroids, chronometers, surveyors' apparatus, etc. Much could be written of the minute precision with which their highly skilled operations are conducted, and the extraordinary variety over which they extend; indeed, the entire gamut of modern achievement in delicate and complicated mechanisms of every description is covered by them. The ordinary person inspecting the astonishing things done by this enterprising firm feels how great the gulf is between the keen specialisation that is intimately acquainted with cause and effect in microscopic appliances and adjustments in wheels and springs, etc., and the ignorance of the lay mind in the same connection.

Messrs. Martinus C. Perera and Son have also attained well-deserved recognition as platers in gold, silver, nickel, brass, and copper, and for their enamel, bronze, and lacquer work. The articles brought to them for attention are exceedingly varied—jewellery, domestic utensils, swords and military accoutrements, cycle and motor-car fittings, etc. These reach the firm in every degree of dilapidation, some apparently quite beyond redemption; but after they undergo the magic Perera process, they are returned to the owners as bright and attractive as they were when new, if not, in some instances, very much better.

JOSEPH COSTA and BROS., General Merchants, Main Street, Pettah.

THE stock of things eatable in the premises of Messrs. Joseph Costa and Bros. embraces innumerable *bon mots* well adapted for the solution of culinary problems for special occasions when a departure is required from the stereotyped menus that arouse no gastronomic enthusiasm.

Equal attention is paid by the firm to their importations of wines and spirits, which include many of the best brands on the market. They have branches at Kandy, Nuwara Eliya, Matale, and Maskeliya, supplying, in addition to groceries

Messrs. Martinus C. Perera and Son are holders of the Harvey Frost certificate of proficiency in motor-tyre vulcanising, and devote special attention to that class of work.

The business was established in 1884 by the senior partner, Mr. Martinus C. Perera, who has been engaged for upwards of fifty years in all kinds of work relating to delicate mechanisms. He was born in Ceylon and was trained in various colleges there, winning prizes in optics, physics, acoustics, electricity, etc. After serving for many years in the Survey Office, he started business for himself, as already indicated, in 1884, and soon built up a very appreciative clientele amongst whom he won high praise for the quality of his workmanship. Mr. Perera was the first to introduce electro-plating and its kindred processes into Ceylon. He it was also who introduced there the Underwood typewriters, and acted as agents for them for many years. Cycling in Ceylon owes much to Mr. Perera, who has taken a prominent part in connection with the various cycling clubs of the island, and has had no fewer than 36 cycles.

Mr. Perera has long been a district visitor of the Social Service League and Friend-in-Need Society and has done much good work in that connection, as well as a member of the Discharged Prisoners' Aid Association of Ceylon. He is Vice-President of the Ceylon Workers' Federation. His eldest son, Cecil, has been in partnership with him since 1915.

and provisions, all kinds of drapery and ladies' and gentlemen's outfitting goods. The firm have an extensive connection throughout Ceylon with planters and hotels, and own 500 acres of rubber plantations.

The business was started in 1881 at Matale, whence it developed to its present proportions. The partners are Messrs. P. Peries and S., M. F., and J. Costa. The firm's telegraphic address is "Costas," Colombo, and the codes used by them are the A B C 6th edition and Bentley's.

O. L. M. MACAN MARKAR, Jewellers, Pearl and Gem Merchants, G. O. H. Building.

ADMIRABLY situated in the G. O. H. Building, and opening into the entrance hall of that establishment, is the emporium of the well-known firm of jewellers, pearl and gem merchants, Messrs. O. L. M. Macan Markar, who have done, and are doing, very much in sustaining the fame of Ceylon for its precious stones. The first acquaintance of the compiler of this volume with the store in question was made some years ago, when he succumbed to its wonderful display of jewels, and invested in some of them to an extent which, after the initial glamour was over, seemed more than the state of his exchequer at that time warranted. On reaching London, however, the gems pur-

chased from Messrs. O. L. M. Macan Markar were sold by him at a very handsome profit to the best known jewellery firm there, if not in the world. So on returning to Colombo for the purposes of "Seaports of India and Ceylon," Messrs. O. L. M. Macan Markar's establishment was regarded with the appreciation of a friend that had been tried and found worthy of the utmost confidence and encomiums.

When precious stones are about to be purchased, the most important essential to be considered is the probity of the seller. In that connection the reputation of Messrs. O. L. M. Macan Markar, who have branches at Shephard's Hotel

and the Continental-Savoy Hotel, Cairo, is world wide, and as a firm who are honoured and appreciated by Royalties, including H.M. King George and H.R.H. the Prince of Wales, they may well be regarded as in the category of those standards of rectitude that are accepted as beyond all controversy or refutation. The stock of gems and jewellery of all kinds kept by Messrs. O. L. M. Macan Markar is exceedingly varied and includes exquisite designs in platinum and diamond, sapphire, and emerald bracelets and necklaces of Ceylon pearls running into thousands of pounds each. Amongst their wonderful collection of precious stones is what is said to be the largest sapphire in the world. It is valued at £50,000, was discovered in 1926 at Pelmadula, Ratnapura ("City of Gems"), Ceylon, and weighs over 400 carats after having been cut and polished. Another of their treasures is the largest cat's eye extant, which they do not wish to sell; and it was exhibited to King Edward when, as Prince of Wales, he

visited Ceylon in 1870. H.M. King George and H.R.H. the Prince of Wales also inspected that remarkable cat's eye when they passed through Colombo.

The most unique sight in the island, so far as gold and jewels are concerned, is the magnificent and unique private collection of antique heirloom jewellery of ancient Ceylon, which is exhibited free in the firm's attractive establishment, and should be seen by every visitor to Colombo able to appreciate the wonderful beauty and wealth of the display.

The business was established in 1860 by the gentleman whose name it bears, and who died in 1901. It is now directed by his sons, who are as follows: The Hon. Mr. H. M. Macan Markar, M.L.C.; and Messrs. S. D., A. V., and M. S. Macan Markar. The firm's cable address is "Macan," Colombo, and their codes are the A B C 5th edition and Bentley's.

D. C. JAYESINGHE and CO., Exporters, Importers, and Commission Agents, 39, Keyzer Street.

NONE of the many avocations sustained by the complexity of modern commerce is more useful and ubiquitous than that of the commission agent, who acts as medium between buyers and sellers, and negotiates between them on terms favourable to both, bringing to merchants and others in places remote from the sources of production the best that the world can offer for their particular requirements. Such is the character of the business of Messrs. D. C. Jayesinghe and Co., who may be said to be resident commercial travellers in Colombo, where, as well as throughout Ceylon, they have an extensive connection, and are representatives of many famous concerns in Europe and America, including the following:—

Muller & Phipps (Asia), Ltd.; Dayton, Price & Co., Ltd., New York.
Twentsche Overseas Trading Co., Ltd., Holland.

A. W. Price Bros. & Co., Birmingham.
Wirth & Co., London and Buhler.
E. Mercier & Co., France.
Creighton & Lynam, London.
A. Frisof & Cie., Belgium.
Hans W. M. Meyer, Hamburg.
Fairbanks Co. (Europe), Ltd., London.

The goods handled by Messrs. D. C. Jayesinghe and Co. embrace merchandise of every description, but chiefly piece-goods, hardware, provisions, wines and spirits, pharmaceutical articles, etc. They have been established since 1907, and the growth of their business has necessitated various changes of premises, the last being recently into the present quarters at 39, Keyzer Street. The partners are Messrs. D. T. Jayesinghe and P. V. Gunesekara. The firm's cable address is "Singjaye," Colombo, and their codes are the A B C 5th edition, Bentley's, Voller's, and private.

WILLIAM PEDRIS and CO., Manufacturing Opticians and General Merchants, Kayman's Gate, Pettah.

WHEN it is remembered that 85 per cent. of all knowledge comes through the eyes, and when it is borne in mind also how easily the sight can be irremediably impaired through inattention or defective glasses, there is no refutation of the importance of the business of Messrs. William Pedris and Co., who are the only manufacturing opticians in Ceylon. Since the commencement of their optical activities in 1912 Messrs. William Pedris and Co. have been missionaries in Ceylon in everything pertaining to the welfare of the eyes, and thousands of persons all over the island owe to them the preservation of that priceless possession, the sight, and, therefore, all that is entailed thereby. The machinery and other equipment in Messrs. William Pedris and Co.'s premises embrace the most modern inventions for sight testing, the remedying of imperfect vision,

and the preservation of the sight. The grinding of lenses and all the manufacturing operations range from the raw materials up to the gold finished articles. Every individual case is treated with minute understanding, and every prescription is fulfilled with scientific exactitude.

It may be mentioned that at the All Ceylon Industries Exhibition a gold medal was awarded to the firm for the high quality of their lenses.

Messrs. William Pedris and Co. are also general merchants and importers of hardware, crockery, glassware, household utensils, building materials, estates supplies, etc. They have been established since 1898, and the proprietor of the business is its founder, Mr. D. William Pedris. The general manager is Mr. K. D. Pedris. The telegraphic address is "Pedrico," Colombo.

THE IMPERIAL MOTOR WORKS, Braybrooke Place, Slave Island.

Motor garages, like the vehicles which support them, differ very greatly in character and scope. Most of them are agencies of famous cars, and each has thereby an individuality entirely its own. The Imperial Motor Works, for instance, have been since 1925 sole agents in Colombo for the French Donnet-Zedel and De Dion Bouton cars, which are growing in popularity for their many high-class qualities and eminent suitability to the climate and road conditions of Ceylon.

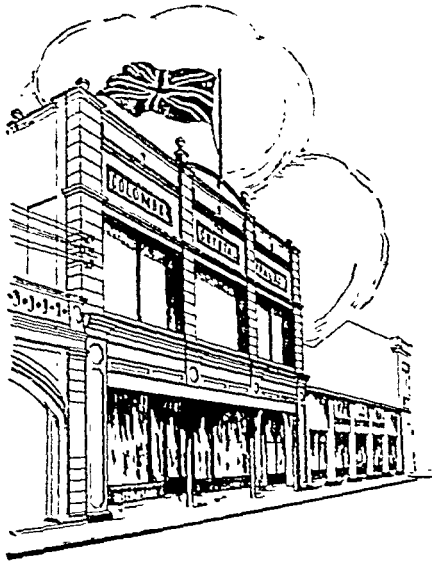
The Imperial Motor Works are noted for the excellence of their work in connection with repairs

of every description, and for the building of bodies of trucks. Indeed, in the latter direction, they are specialists equal to the swift and skilful solution of every problem that may arise for uncommon requirements in vehicles for road transportation. About 65 workmen are employed.

The business has been established since 1908, and is under the personal supervision of its proprietor, Mr. P. V. J. Weerappah, who is a practical expert in all that relates to motor engineering. The firm's telegraphic address is "Imperial."

COLOMBO CRYSTAL PALACE, Keyzer Street.

THE Colombo Crystal Palace is a name that immediately arrests the attention and is not readily forgotten. The business so designated was started in 1889, and has become well known throughout



COLOMBO CRYSTAL PALACE.

Ceylon. The origin of the title lay in the firm's initial specialisation in glassware and crockery.

As the business developed other departments were added from time to time, and now the con-

cern, giving employment to about 125 persons, is devoted to merchandise of the most comprehensive description, including cutlery, electro-plated lamps, picture frames, drapery and millinery, gentlemen's outfitting, etc.

The exterior of the Colombo Crystal Palace is misleading so far as its size is concerned. From the street it looks a negligible sort of place, with little indication of its popularity and the reasons thereof. But an inspection of its ramifications and also of the firm's other establishment for general hardware, estate supplies, and building materials in Prince Street, facing Third Cross Street, reveals an extensive business. The Colombo Crystal Palace firm have recently been devoting special attention to indenting on behalf of others, and while their retail trade is considerable, they are, however, chiefly general wholesale merchants. Mr. W. M. Mohamado Usooff, who founded the business in 1889, is still actively engaged in its control, and in partnership with him are his brothers, Messrs. W. M. H. M. Haniffa and W. M. Abdul Jabbar. The general manager is Mr. M. I. L. Mohamed Nuhman, F.C.I., Birmingham.

The firm's telegraphic address is "Crystal," Colombo, and the codes used by them are A B C 5th and 6th editions, Bentley's, Western Union, Lieber's, and private.

ABDULHUSSAN DAVOODBHOY, Merchants and Exporters, 130, Dam Street, Pettah.

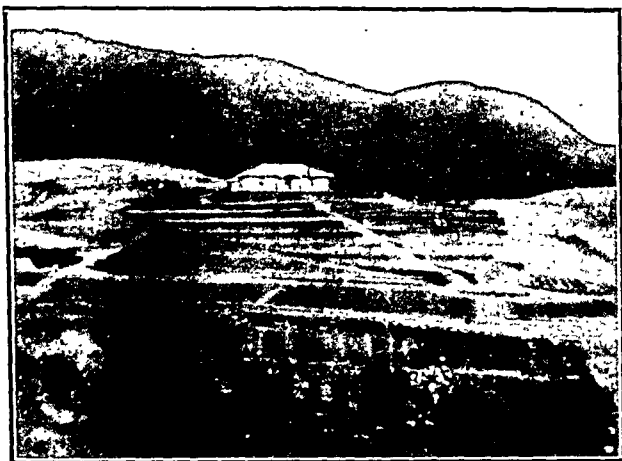
THE premises of Messrs. Abdulhussan Davoodbhoy at 130, Dam Street, Pettah, are not much to look at, and the uninitiated reviewer of local commerce and industry, searching for facts, figures, and impressions, would be quite justified in passing them by. But the aspect of a business place is not always an accurate index to its status and resources. Everyone acquainted with the ramifications of Colombo's trade must know Messrs. Abdulhussan Davoodbhoy, whose operations as merchants and exporters are on an extensive scale, and quite at variance with the erroneous conceptions which might be deduced from the somewhat negligible appearance of their establishment. In the Pettah district especially the name of Abdulhussan Davoodbhoy is familiar to the

man in the street, and commands the respect of all classes of the community. The firm are importers of general hardware, enamelled ware, domestic utensils, paints and oils, building materials, and estate supplies of every description, explosives, etc., etc. They have branches at Bombay and Calicut, and connections in England, America, China, Germany, and Japan.

The business was established in 1906 by the gentleman whose name it bears, and who died in 1909. The present proprietors are his sons, Messrs. Ackberally, Caderbhoy, Mohmedally, Alibhoy and Abbasbhoy Abdulhussan Davoodbhoy. The firm's telegraphic address is "Morbiwala," Colombo.

THE TOGO COMPANY, Importers, Exporters, and Commission Agents, 57, Keyzer Street.

THERE are not many Japanese in Colombo, and the leading firm of that nationality there is The



**MARKET GARDENS OF
THE TOGO CO. AT NUWARA ELIYA.**

Togo Co., which was established in 1914. Through it the people of Ceylon are provided with porcelain, glassware, enamelled ware, cotton goods, and the great variety of articles embraced by the term sundries, manufactured in Japan, together with the celebrated Sapporo Beer of that country for which The Togo Co. are agents. The firm are also exporters, and their principal commodity in that connection is tea.

No people are more enterprising and resourceful than the Japanese in market gardening, and accordingly it is not surprising to find that The Togo Co. have attained very noteworthy achievements in relation thereto. In 1925 they began at Nuwara Eliya the cultivation of fruit and vegetables, and so well have they developed that undertaking that they now transact a flourishing business as contractors for the supply of fresh fruit and vegetables to the Japanese lines of steamers visiting Colombo. The firm's cable address is "Togo," Colombo.

M. D. and A. D. SILVA, Stationers and General Merchants, 26, Norris Road.

It is not very often that one comes across in the Orient a business like the one indicated above, and its specialisation in paper, general stationery, and educational books is more akin to the procedure of Western exponents of those branches of trade, who, because of their proximity to the actual sources of production, are in possession of advantages which their less fortunate Eastern contemporaries lack. However, there is no gainsaying the fact that Messrs. M. D. and A. D. Silva's business, operated with enterprise and ability, is well calculated to meet the most diverse

requirements in all that relates to its supplies. An inspection of their stock of general stationery and educational literature affords an object lesson in the comprehensive character of modern necessities in such things.

The business was established in 1890, and was taken over in 1919 by Mr. J. D. S. Rupasingh (general manager) in partnership with Mr. A. D. Silva and Mr. C. E. D. S. Rupasingh. The firm's telegraphic address is "Martinus," and the codes used by them are the A B C 4th and 5th editions and Bentley's.

**P. F. GOONESEKERE and CO.,
Importers of Sewing Machines and General Merchandise. Head Office: 36, Main Street.**

ONE of the most useful inventions of modern times is undoubtedly the sewing machine, and it is difficult now to realise the restrictions and limitations that must have obtained before the introduction of that invaluable contrivance, which has revolutionised all the operations associated with the production of clothes and many other things.

Reference to sewing machines in Ceylon calls for reference to Messrs. P. F. Goonesekere and Co., whose influence in that connection extends throughout the island. They are importers of many kinds of sewing machines, and are sole agents in Ceylon for The Pfaff Sewing Machine Co., of Kaiserslautern and The Gritzner Sewing Machine Co., of Durlach, Germany. They are also representatives of The Jones Sewing Machine Co. of England and The New Howe Sewing Machine Co. of New York.

While sewing machines bulk so largely in the firm's activities, they form, however, only one department of the business, for Messrs. P. F. Goonesekere and Co. are also importers of china-

ware, enamel and aluminium wares, glassware, trays, vases, clocks, tableware, fancy goods, etc.

Messrs. P. F. Goonesekere and Co. have been established since 1917. Their initial establishment was at No. 11, Keyzer Street, which is still maintained, but which soon became inadequate for their trade. In April, 1925, they opened a branch at Kandy, and in the following September another in China Street, Pettah, Colombo. In July, 1926, they moved into their present commodious headquarters at 36, Main Street, Pettah.

The sole proprietor of the business is Mr. P. F. Goonesekere, to whose ability and enterprise is due the noteworthy expansion it has attained in so comparatively short a period.

The firm's telegraphic address is "Dove," and they use Bentley's code. Their agents in London are Messrs. J. R. Martin and Co., Ltd., 31, Budge Row, Cannon Street, E.C.4, and in Germany Messrs. Mather, Iken, and Co., South Sea Buildings, 9, Lange Muehlen, Hamburg.

A. F. RAYMOND and CO., Undertakers, "Raymond House," Kanatta.

MESSRS. A. F. RAYMOND AND CO., members of the British Undertakers' Association and Undertakers to His Majesty's Army and Navy, have been established since 1885, and their business is the principal one of its kind in Ceylon. The firm's premises are conveniently situated close to Kanatta Cemetery, and are equipped with everything conducive to the speedy and perfect execution of orders. A business such as this is different from any others, and requires discretion and tact in the sad necessity that brings it customers. Messrs. A. F. Raymond and Co.'s long experience of their trade and the efficient and sympathetic way in which they carry out everything committed to their trust has won for them the highest reputation amongst all classes of people. They do embalming and exhumations for shipment abroad and supply coffins and caskets of every description, from the cheapest up to productions of the richest and costliest materials. Messrs. A. F. Raymond and Co. are the only undertaking firm in Ceylon who have motor as well as horse hearses, and these are appointed in keeping with their solemn and dignified purpose. The firm also undertake cremations and make arrangements for that work to be performed at any of the local cemeteries.

The completeness of Messrs. A. F. Raymond and Co.'s activities is further demonstrated by their operations in the production of all kinds of marble monuments of choice designs. They

obtain their marble from the world's chief source of supply, Carara, Italy, and the lettering they do on the grave stones is of imperishable black lead, hammered into the excavations in the



IN MEMORY OF CEYLONESE FALLEN IN
THE WAR 1914-1918.
(Memorial supplied and erected by A. F. Raymond and Co.)

marble. The founder of the business, Mr. A. F. Raymond, died in 1910, and the partners in it now are his sons, Messrs. Arthur Arion, S. R., L. L., C. E., H. L., and M. F. Raymond, each of whom takes an active part in its management.

P. N. KAPADIA,

General Merchant, Fourth Cross Street, Pettah, and "Pettah Commercial Stores," Dam Street.

FOURTH CROSS STREET is an exceedingly busy thoroughfare and typical of the many other similar streets in the Pettah district, where so many of the native merchants have their premises. Amongst the largest of these merchandising concerns is the business founded in 1887 by the late Mr. P. N. Kapadia, and now managed for his family by Mr. C. N. Lakdawalla, who has been connected with it for many years. Through the firm's establishment in the thoroughfare mentioned are received and despatched large quantities of provisions, especially flour, in which the firm's

trade runs into about 6,000 bags of 196 lbs. each per month. The front section is in the form of a general store, and at the back is excellent warehouse accommodation for the materials in which the firm deal.

There is a branch of the business, entitled "Pettah Commercial Stores," in Dam Street, where all kinds of groceries, provisions, oilmen's stores, and general household requirements are kept in extensive variety. The firm's telegraphic address is "Anchor," Colombo.

THE CEYLON BAKERY, Chatham Street.

It is certainly very remarkable that amongst all peoples bread, the staff of life, never becomes a surfeit to the palate like most other foods. Nevertheless, there are many kinds of bread—good, bad, or indifferent, and good bread is probably the most commendable of all human productions. The Ceylon Bakery apparently think so judging by the care they take in the quality of their output—light, wholesome, palatable and beautifully browned loaves perfectly baked, of which they turn out about 1,500 lbs. daily, besides all manner of delicious cakes and pastries. They also make to order rich and ornate

cakes for birthdays, weddings, and other festive occasions, in a large variety of very charming designs. The firm are army contractors and suppliers to naval contractors.

The business, established since 1885, is the largest of its kind in Colombo, and gives employment to about 70 persons. In Chatham Street the firm have popular tea rooms where their cakes and imported chocolates are obtainable. Their bakery premises are situated in Pettah and Slave Island. The present company was formed in 1925, and the general manager is Mr. C. M. Nilgiri.

J. B. PINTO and SONS, Druggists and Dispensing Chemists, 30 Chatham Street.

ALL business undertakings represent varying degrees of utility and importance. None, however, is more necessary than that of the druggist and dispensing chemist, on whose service and supplies hang frequently the issues of life and death. Amongst Colombo's representative firms in that connection mention must be made of Messrs. J. B. Pinto and Sons, who endeavour to exemplify the care and efficiency so indispensable in the pharmaceutical trade, especially in the making up of doctors' prescriptions, when the slightest inattention or forgetfulness may lead to irremediable and lamentable consequences. In a climate like that of Colombo it is imperative that

pharmaceutical goods should be as fresh and pure as possible. Accordingly, Messrs. J. B. Pinto and Sons regulate their stock so that, while sufficient to meet the demands of their trade, it is not too bulky but just of the right quantity to ensure its perfection. They obtain their importations direct from the leading sources of manufacture in England, where the firm are held in due regard.

Messrs. J. P. Pinto and Sons commenced business in 1896 at 43, Chatham Street, and removed in 1914 into their present more commodious and attractive establishment. The firm's telegraphic address is "Pintosons," Colombo.

**BRITISH-CEYLON TRADING CO.,
Merchants and Manufacturers' Representatives, 17, Baillie Street.**

THE BRITISH-CEYLON TRADING CO. was established in 1922, and was reconstructed in 1924. The company operate as general merchants and importers of hardware, cement, cutlery, oilmen's stores, flour, glassware, enamelware, electro-plated goods, rugs, carpets, etc. As exporters they handle all classes of Ceylon produce, but especially ebony, satin, and teak woods. There are branches of the business at Kandy, Galle, and Jaffna. The partners are Messrs. M. Benjamin and C. P. Chelladurai. The company's cable address is "Bensdor," and the codes used are

Bentley's and the A B C 5th edition. They are sole agents in Ceylon for the following:

A. Boake Roberts & Co., Ltd., London.
F. A. C. Van der Linden & Co., Hamburg.
Mesmaekers Freres, Belgium.
Rotterdam Cheese Co., Holland.
George Beruhardt, Leipzig.
Gustav Engel, Berlin.
D. R. Simpson & Co., Bombay.
The Noble Dairy, Bombay.

The British-Ceylon Trading Co. own and operate THE COLOMBO SHIP-CHANDLERY CO., Stevedores and Dubashes, which was established in 1924.

A. V. R. A. ADYCAPP A CHETTY, General Merchant, 15-22, Seat Street, Pettah

ONE of the most prominent and influential names in the busy and interesting Pettah district of Colombo is that of A. V. R. A. Adycappa Chetty, whose business, established by him in 1887, is familiarly referred to as the "A. V. R. A.," and is concerned chiefly with wholesale trade in perfumes, oilmen's stores, haberdashery, condiments, preserved foods, etc. He is agent for Dr. George Dralle's soaps and perfumes, The Indo-Petroleum Co.'s candles, etc., and sub-agent for Lever Bros.'

"Sunlight" soap, etc. In the title of the business the A. indicates grandfather, the letters V. R. his son, and A. the son of the latter. The son of Mr. A. V. R. A. Adycappa Chetty, Mr. A. Veerappa Chetty, has travelled extensively throughout Europe for the purpose of studying business methods and conditions, and is now in charge of the concern. The firm's telegraphic address is "Avra," and the codes used are the A B C 5th and 6th editions, Bentley's, and private.

WIJAYARATNA and CO., Newsagents and Booksellers, Manning Mansions, Slave Island.

BOOKSELLING is usually only a department of the concerns by which it is carried on in the Orient; but Messrs. Wijayaratna and Co. are devoted to it entirely, and are the only firm in Ceylon with that distinction. It may, therefore, be assumed, and rightly, that their stock is thoroughly comprehensive and representative of modern literature in its most popular phases. Their establishment in Manning Mansions has a glass frontage of about 50 feet, and in its commodious interior may be found reading matter to suit all tastes grave and gay—books to be treasured after perusal, and others, cheap editions, not meant to endure but to while away hours of recreation and rest.

PERERA and SON,**Bakers and Confectioners, Steuart Place, Colpetty, and Bristol Hotel Building, Fort.**

THERE is nothing more common than a loaf of bread; there are few things cheaper; but there is nothing more intrinsically valuable; nothing more continually used and yet less considered. Behind the golden crust is a more precious equivalent than can be extracted from the gold mine; and behind the silken texture of the snowy crumb is something more beautiful than the hangings of kings' palaces. People doubtless do not have such thoughts about the bread made by Messrs. Perera and Son, but that is the fault of the people, not of the bread. Light delicious bread made by them, when regarded as emblematic of the staff of the Commonwealth, is of more importance than the gold standards of nations.

Messrs. Perera and Son supply much of the bread consumed in the homes of the principal European and other local residents. They are

also popular for their many varieties of confectionery and cakes, including beautiful and artistic examples of all kinds for weddings, birthdays, and festive occasions.

The firm's bakery at Colpetty gives employment to 50 persons, and at the time of writing arrangements are being made for its complete remodelling and equipment with the latest machinery pertaining to the trade, as the result of the visit of its proprietor, Mr. K. A. Albert Perera, to Great Britain and Germany for the purpose of studying the best baking plants in that connection there.

The business was started in 1907 by Mr. Charles Perera, who retired in 1921, leaving it under the sole control of his son, Mr. K. A. A. Perera already referred to. The firm's telegraphic address is "Pastry," Colombo.

NEW CENTRAL BOOT WORKS, 16, Baillie Street.

ALL the operations in the production of boots and shoes are performed by machinery in the great factories in America and Europe devoted to that branch of industry, and to-day it is seldom that one comes across a firm maintaining the ideals and traditions of the shoe-makers' craft as it used to be conducted entirely by hand. Such a firm, however, is found in the one carrying on business under the name of the New Central Boot Works. That undertaking is an interesting contrast to the ordinary stores where footwear is obtainable *en masse*, and not according to order. Shoes made to fit the exact measurements of one's feet are naturally much more likely to prove comfortable than those made on standard scale. Furthermore, the hand-made article has always been regarded as much better and more reliable in every way than the product of mass production by machinery.

But, be that as it may, the New Central Boot Works of Colombo is serving an excellent role, and is deserving of every encouragement. Boots and shoes are made there to suit every requirement, and the materials in which they can be produced offer a wide selection to customers, who may, if they so desire, provide their own. Many factory-made boots and shoes are of very inferior substance, which is not detected until they are subjected to wet and hard wear. The high quality leather supplied by the New Central Boot Works is well calculated to withstand the roughest usage. The firm are also leather merchants and importers of everything associated with gentlemen's outfitting, haberdashery, etc.

The business has been established since 1912, and the managing partner is Mr. W. S. Silva.

H. M. GUNASEKARA,**Broker, Auctioneer, Valuer and Commission Agent, Marlborough House, Union Place, Slave Island.**

MARLBOROUGH HOUSE, Union Place, Slave Island, is an address historically suggestive and reminiscent, but it is much more interesting than anything that can be inferred from its nomenclature, for is it not the place where Colombo's regular weekly auction sales are held—auction sales that solve many an economic problem and bring profit and pleasure to many persons. The goods assembled there week after week are as varied as human necessity, and eloquent of the mutability of human affairs—things of beauty and utility for ordinary circumstances or uncommon purposes, articles of every material, cloth and leather, wood and steel, silver and gold, glass and china, books and pictures, articles common and unique, familiar and mysterious. Nowhere in Colombo is a better resort for the seeker of curios and valuable objects of art, for Mr. H. M. Gunasekara, proprietor of the business, was for

thirteen years an official of the Colombo Museum and Library, and is a greatly experienced connoisseur in odds and ends of old china, jewellery, and the infinity of articles for the curio cabinet and the places of distinctive display. Mr. Gunasekara's auctioneering services are highly appreciated when houses have to be given up and their contents disposed of. He has very many testimonials in that connection, including a large number from prominent people thanking him for the able and satisfactory manner in which their goods and chattels had been sold, and the unexpectedly high prices which he had obtained for them.

Mr. Gunasekara is the only person in Colombo who sells stamps by auction. He has been established since 1912, and operates also as a broker, valuer, and commission agent.

M. B. UDUMAN, Proprietor of Travellers' Mart Pharmacy, Travellers' Mart, Travellers' Motor Touring Co., York House, York Street.

At the head of York Street is the Travellers' Mart Pharmacy, which is well named in view of the comprehensive assortment of necessary things provided there for the traveller by sea or land. No goods are more imperative than those per-



YORK HOUSE AND TRAVELLERS' MART PHARMACY.

taining to the prevention and remedying of pain and illness and the enhancement of physical welfare, and it is in such things that the Travellers' Mart Pharmacy caters with thorough understanding of the pharmaceutical trade. The great

development which has taken place in patent medicines, for instance, is exemplified in the establishment in question by the many famous specifics included in its stock, together with all kinds of toilet articles, perfumery, etc. The making up of doctors' prescriptions is an important department of the business, and is in charge of a qualified expert.

The business was founded many years ago under the name of Fort Cash Chemists, and used to be located at No. 1b, Chatham Street. In 1926 it was taken over by Mr. M. B. Uduman, who is a very successful merchant, and has many interests in Colombo, including a good deal of land and house property.

Mr. Uduman is owner of the business carried on under the name of the Travellers' Mart, also at the head of York Street, where a very comprehensive assortment of tobacco, cigars, and cigarettes meets all requirements in that connection and justifies the popularity of the concern amongst smokers. The Travellers' Mart is also noteworthy as printer and publisher of Ceylon picture postcards, of which it has one of the largest and best selections in the island.

Mr. Uduman likewise owns and operates the Travellers' Motor Touring Co., which has an excellent fleet of the latest seven-seater cars in charge of experienced and careful drivers.

Mr. Uduman's telegraphic address is "Enver," and the codes used by him are the 4th and 5th editions of Bentley's, and private.

S. W. WALLES and CO., Livery Stable-Keepers, Veterinarians and Shoeing Smiths, Importers of Horses; Carriage-builders, Undertakers, and Commission Agents, 79, Union Place.

At the beginning of the present century the horse still retained its indispensability to human requirements, and was the chief medium for the conveyance of goods and people on country road and city street. Although the coming of the motor vehicle has relegated it to the limbo of the obsolete, the noble animal that has served humanity throughout the ages in peace and war is still in evidence in Colombo, as in other centres of population, and the principal concern there in association with horses is that of Messrs. S. W. Wallès and Co., which, established in 1878, is reminiscent of the times when the livery stable-keeper's facilities and resources contributed very much to the daily routine of business and pleasure. In pre-motoring days Messrs. S. W. Wallès and Co.'s operations in the importation of horses were on an extensive scale. Their trade in that connection is now, of course, very much smaller, although in the importation of race-horses and estate hacks they still operate fairly well considering the changed times. The firm devote special attention to the reception, care,

and despatch of horses to any part of the world.

In former days, too, Messrs. S. W. Wallès and Co. were the principal coach and carriage builders and saddle and harness makers in Colombo. They also still continue these branches of trade, and exercise great care in endeavouring to exemplify the skilled workmanship with which they have always been associated. This is well demonstrated by their activities as manufacturers of boots and shoes, all of which are made by hand on the old-fashioned principles, when the shoe-maker's craft and its traditions had not been ousted by machinery.

Messrs. S. W. Wallès and Co. have likewise been prominent as funeral furnishers and undertakers. To them have been entrusted the funerals of Governors and many prominent people; and in the firm's office may be seen a testimonial regarding the very efficient manner in which they embalmed and despatched to Europe the body of one of the Governors of Indo-China.

The proprietor of the business is Mr. S. D. Wallès, grandson of the original founder.

**A. C. SUMPS and SON, Manufacturers of Rattan, Bamboo, Coir and Khus-Khus Goods,
24, Union Place.**

A visit to the premises of Messrs. A. C. Sumps and Son affords an interesting insight into the manufacture of cane furniture, especially of the best quality. This firm have been established since 1859, and the great variety of their artistic designs in chairs and settees, cradles, baskets, and everything that can be made of the materials handled, is well worth inspection by visitors to the port. Behind the office and showroom is the factory, where the highly-skilled workers are engaged in their respective occupations, each of them specialising in various branches of the trade. Particularly noteworthy is the firm's cane matting, which is practically indestructible, and is made to order in any measurements. It is excellently adapted for covering the floors of dining-

rooms, drawing-rooms, bedrooms, bathrooms, etc. It requires no tacks nor nails to hold it in position, for its own weight does that, and it can be folded up instantly for cleaning or storage. The cane used by Messrs. A. C. Sumps and Son is the best quality of Singapore cane, which is very much better for manufacture into furniture than the cane grown in Ceylon.

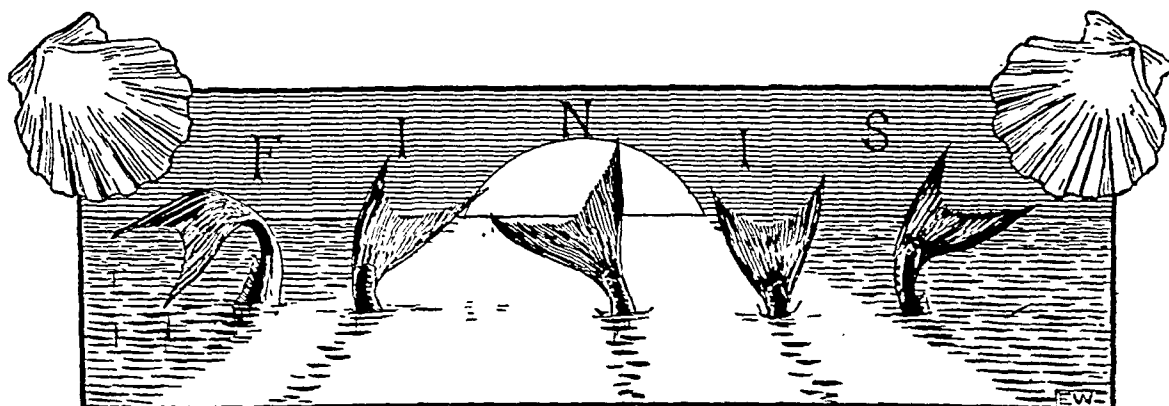
At the Wembley Exhibition Messrs. A. C. Sumps and Son were awarded a gold medal for the high-class character of their productions, a fact that speaks more eloquently than columns of printed eulogy. As already mentioned, their business was established in 1859, and was taken over in 1921 by the present proprietor, Mr. Edwin Pate.

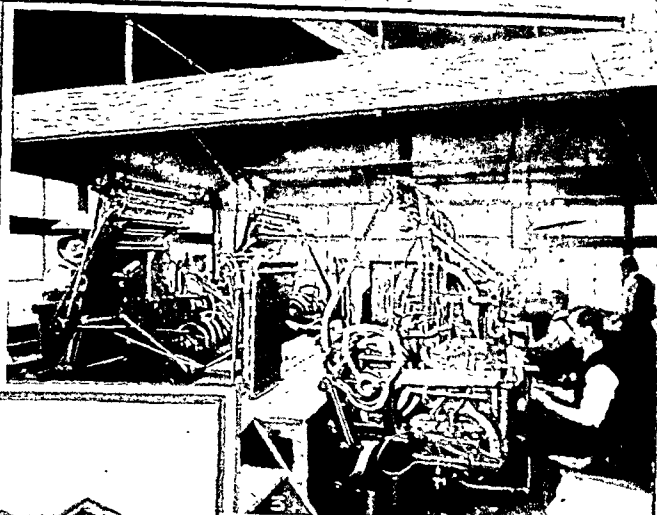
P. D. SIEBEL, Horticulturist, Turret Road and Flower Road, Cinnamon Gardens.

IN the beautiful district of the Cinnamon Gardens are situated the extensive gardens which, founded by the late Mr. P. D. Siebel, render to the people of Colombo a service that is very highly appreciated. That service places before them practically the entire floral resources for which the island is famous. The horticulturist's trade in Great Britain is greatly hampered by seasonal limitations and the long winter when floral decorations are restricted to evergreens and hot-house productions. In Ceylon it is summer all the year round; and so in the delightful Siebel gardens is concentrated everything that can be utilised in plant, tree, and flower for the expression of joy or sorrow or the pleasure of daily routine in home decoration. The Siebel gardens are in two sections of several acres each. One is exactly opposite Victoria Park, and the other not far away in Flower Road. The flora of Ceylon is very rich, comprising upwards of 3,000

flowering plants and ferns, or three times as many as in the British Isles. It can, therefore, be well understood how great are the Siebel resources in the supply of everything pertaining to horticulture. An example of this was afforded at the Colombo Motor Exhibition of 1927, to which the Siebel gardens supplied more than 1,500 plants for decorative purposes. From these gardens are obtainable all kinds of plants and trees on hire at very moderate rates. Particularly noteworthy is the versatility manifested there in the supply of funeral wreaths, which are made up in exquisite designs to suit every requirement.

It is interesting to note that at the Colombo Agri-Horticulturist Exhibition in 1899 Mr. Siebel received a gold medal for his plants and flowers, the only one ever given in that connection in the island. A branch of the business is established at Kandy.





PREMISES OF THE *City Press*,
148/9, ALDERSGATE STREET,
LONDON, E.C., WHERE ALLISTER
MACMILLAN'S BOOKS ARE
PRINTED AND PUBLISHED.

- (1) Exterior View.
- (2) Corner of the Binding and Folding Room, showing Wire Sewing Machines.
- (3) Eastern portion of the Linotype Composing Room.
- (4) Portion of Machine Room showing types of the leading class of machines used, viz.: Perfecting Machine, Two-Revolution, Art Cylinder, and Drum Cylinder Machines.
- (5) Section of one of the rooms devoted to setting type by hand.



The business of MESSRS. W. H. & L. COLLINGRIDGE, Printers and Publishers of "Seaports of India and Ceylon" was founded in 1846 by the late Mr. W. H. Collingridge, and gives employment to upwards of 300 hands (male and female). The present partners are Mr. Leonard Thomas Collingridge and Mr. Hugh Collingridge, both of whom take an active interest in the work. The firm possess the most modern plant of type and machinery, including an art rotary machine, for high-class work, and are second to none for the quality of their productions. In addition to the main structure in Aldersgate Street, the premises have grown in all directions, other buildings in Newbury Street, Bartholomew Place, and Half Moon Passage having been added from time to time.



PREMISES OF W. H. & L. COLLINGRIDGE, "CITY PRESS," 148-149, ALDERSGATE STREET, LONDON, E.C., WHERE ALLISTER MACMILLAN'S BOOKS ARE PRINTED AND PUBLISHED.

PROBABLY no other country offers more varied attractions to the traveller than India, and much that is of historical, geographical, and archaeological interest is situated along the route of the East Indian Railway, which passes in a north-westerly direction from the port of Calcutta through the provinces of Bengal, Bihar, and Orissa, and the United Provinces of Agra and Oudh, serving the entire Gangetic Valley of India, and the country lying between the Jumna and Ganges Rivers. Through its junctions with the North-Western Railway, the Great Indian Peninsula Railway, the Bombay, Baroda, and Central India Railway, the Rohilkhand and Kumaon Railway, the Bengal and North-Western Railway, the Bengal Nagpur Railway, and the Eastern Bengal Railway, the East Indian Railway also affords direct access to all parts of India.

About 700 railway stations lie along its route, and all of them are connected by telegraph and telephone. The stations are largely provided with raised platforms, reaching to the floor level of the carriages, waiting rooms or sheds for passengers, and sites suitable for the display of advertisements. At the more important stations refreshment rooms, fruit stalls, bookstalls, and stalls for the sale of the miscellaneous indigenous products of the local craftsmen and artisans, serve to satisfy more completely the needs of the traveller or the acquisitive visitor to India. The peripatetic vendor of the cheaper brands of cigarettes, of Indian comestibles, of tea, aerated waters, ice, and the fruits of the season, is also to be encountered at most stations.

The passenger coaches are of the most modern type, and every advantage has been taken of the generous scope afforded by the 5ft. 6in. gauge to provide ample accommodation with well-fitted interiors, including electric lights and fans, and separate lavatories to each compartment.

Restaurant cars are run on all the principal trains, and are fully equipped on up-to-date lines. Tourists' saloons, luxuriously appointed, are available at all times for touring and other purposes. Another example of the up-to-date stock of the East Indian Railway is a touring cinema car, with a complete cinema plant, films, a cinema operator and mechanic, which traverses the entire system, giving free open-air displays at most of the stations, where the visits of the car form the only break in the monotony of the lives of the inhabitants. Railway propaganda is also worked into these displays.

The East Indian Railway maintains fast daily through mail train services between Calcutta (Howrah) and Bombay, in conjunction with the Great Indian Peninsula Railway, and between Howrah and Simla and Peshawar, in conjunction with the North-Western Railway. For the conveyance of the home mails and of first-class overseas passengers by the Royal Mail boats, a special boat train, known as the "Imperial Indian Mail," is run weekly between Calcutta and Bombay, directly from and to the Mole at the latter port.

This train, the most luxurious in the East, reproduces the chief features of the European Continental boat trains in comfort and conveniences.

Although the natural terminus of the East Indian Railway is at Howrah, Calcutta, on the west bank of the Hooghly River, through the exercise of running powers it has direct access to the Calcutta docks on the East Bank, and to Budge Budge, the centre of the kerosene oil trade. This direct access is obtained by crossing the Hooghly at Bandel, over the Jubilee Bridge, opened in 1887, and thence, via Naihati, over the Eastern Bengal Railway system. To-day this important transportation system, extending over 3,928 route miles, serves an area comprising some of the most important industrial enterprises of the country, and with an estimated population of 32 millions.

The property owned by the old East Indian Guaranteed Railway Company, which had been purchased by the State in 1879, was taken over by a reconstituted company to the end of 1924, when all the contracts then subsisting between the Secretary of State and the Company were determined and the line was brought under direct State management, with effect from January 1, 1925. The arrangements previously made for the transfer of the staff to the Government service enabled that transfer to be effected smoothly and without any change in the services rendered to the public.

An important administrative change, sanctioned in 1924, was the amalgamation of the East Indian and Oudh and Rohilkhand Railways, which was effected from July 1, 1925. From every point of view this was a desirable measure. The economy which must follow the abolition of a separate central administration requires no special proof, and in respect of efficiency the advantages of the unified control of the alternative routes traversing the Gangetic Valley are almost equally obvious. Apart from this, the pooling of rolling-stock and repair facilities and stocks of reserve material will provide means both for actual economy and for more efficient working.

The East Indian and Oudh and Rohilkhand Railways have lately been reorganised and the divisional system of administration introduced, with effect from February 20, 1925, the East Indian Section being divided into four divisions with headquarters at Howrah, Asansol, Dina-pore and Allahabad, and the Oudh and Rohilkhand Section into two divisions with headquarters at Lucknow and Moradabad.

As a sequel to the acquisition of the East Indian Railway by the State and its reorganisation, and with a view to securing the operative, administrative and economic advantages which accrue from assigning clearly defined zones to different railway administrations, it was decided that after April 1, 1925, the Delhi-Ghaziabad Section and the working agency of the Delhi Umballa Kalka Railway should be transferred to the North-Western Railway, the Naini-Jubbulpore Section being handed over to the Great Indian Peninsula Railway as from October 1, 1925.



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